west virginia department of environmental protection

Division of Water and Waste Management
601 57th Street SE
Charleston, WV 25304
Telephone Number: (304) 926-0495
Fax Number: (304) 926-0496

Harold D. Ward, Cabinet Secretary
dep.wv.gov

June 22, 2021

Alan R. Wood
AEP Appalachian Power
c/o AEP-Mountaineer Plant
1 Riverside Plaza
Columbus, OH 43215

RE: WV/NPDES Permit Application No.
WV0048500-Mason County

Dear Sir or Madam:

Your forms for WV/NPDES Individual Permit have been found to be complete.

For your information, the public notice period prescribed in Title 47, Series 10, Section 12.1.b of the West Virginia Legislative Rules issued pursuant to Chapter 22, Article 11 commences on the 29th day of June, 2021 in the *Point Pleasant Register.*

Within twenty (20) days after publication of the public notice, you are required to send to the Office a certificate of publication. This should be sent to:

Director, Division of Water and Waste Management, DEP
Permitting Section
601 57th Street, SE
Charleston, WV 25304-2345
Attention: Lori Devereux

Enclosed are copies of your draft permit, any required fact sheet and the public notice. If you have any questions, please do not hesitate to contact this office at 304-926-0495.

Sincerely,

Lori Devereux
NPDES Team

Enclosures

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER AND WASTE MANAGEMENT

PUBLIC NOTICE

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S, PUBLIC INFORMATION OFFICE, 601 57TH STREET, CHARLESTON SE, WEST VIRGINIA 25304-2345 TELEPHONE: (304) 926-0440.

APPLICATION FOR A WEST VIRGINIA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WATER POLLUTION CONTROL PERMIT

Public Notice No.: L-60-21 **Public Notice Date:** June 29, 2021

Paper: *Point Pleasant Register*

The following has applied for a WV NPDES Water Pollution Control Permit for this facility or activity:

Appl. No.: WV0048500

Applicant: AEP APPALACHIAN POWER
c/o AEP - MOUNTAINEER PLANT
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215-2372

Location: NEW HAVEN, MASON COUNTY

Latitude: 38:58:22 **Longitude:** 81:55:37

Receiving Stream:
OHIO RIVER

Activity:
operate and maintain treatment and disposal systems and best management practices for the direct discharge of treated industrial wastes (process, low volume wastewater, coal pile runoff, metal cleaning wastewater, cooling tower blowdown, landfill leachate, FGD wastewater, and stormwater) via Outlet 001 into the Ohio River near Mile Point 242. Also to operate and maintain disposal systems and best management practices for the direct discharge of untreated storm water runoff via Outlet 003 into Little Broad Run, a tributary of the Ohio River. Also to operate and maintain disposal systems and best management practices for the direct discharge of untreated storm water runoff via Outlet 006 into the Ohio River near Mile Point 242. Also to operate and maintain an intake system and best management practices designated as Outlet INT for the withdrawal of water from the Monongahela River at approximate Milepost 242. Also to acquire, construct, install, operate, and maintain a new 14-acre, lined East Settling Pond and 14-acre, lined West Settling Pond and adjacent tank-based chemical treatment system (organosulfide and polymer) to replace the Bottom Ash Wastewater Treatment Ponds at Outlet 001. Also to acquire, construct, install, operate, and maintain a new ultrafiltration unit (pressure filter) to provide additional treatment at the CPS Treatment Facility at new Outlet 201.

Tier 1 protection is provided for the uses specified in Title 47, Series 2, Section 6.

Business conducted:
Production and distribution of electrical power.

Implementation:
NA

On the basis of review of the application, the "Water Pollution Control Act (Chapter 22, Article 11-8(a)),"

and the "West Virginia Legislative Rules," the State of West Virginia will act on the above application.

Any interested person may submit written comments on the draft permit and may request a public hearing by addressing such to the Director of the Division of Water and Waste Management within 30 days of the date of the public notice. Such comments or requests should be addressed to:

Director, Division of Water and Waste Management, DEP
ATTN: Lori Devereux, Permitting Section
601 57th Street SE
Charleston, WV 25304-2345

The public comment period begins June 29, 2021 and ends July 29, 2021.

Comments received within this period will be considered prior to acting on the permit application. Correspondence should include the name, address and the telephone number of the writer and a concise statement of the nature of the issues raised. The Director shall hold a public hearing whenever a finding is made, on the basis of requests, that there is a significant degree of public interest on issues relevant to the Draft Permit(s). Interested persons may contact the public information office to obtain further information.

The application, draft permit and any required fact sheet may be inspected, by appointment, at the Division of Water and Waste Management Public Information Office, at 601 57th Street SE, Charleston, WV 25304-2345, between 8:00 a.m. and 4:00 p.m. on business days.

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER AND WASTE MANAGEMENT
601 57TH STREET SE
CHARLESTON, WV 25304-2345

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WATER POLLUTION CONTROL PERMIT

NPDES PERMIT NO.: WV0048500
SUBJECT: Industrial Waste

ISSUE DATE:
EFFECTIVE DATE :
EXPIRATION DATE:
SUPERSEDES: Permit No. WV0048500 dated July 10, 2009

LOCATION: NEW HAVEN (City) | Mason (County) | Middle Ohio River 2 (Drainage Basin)

See the next page for a list of Outlets.

TO WHOM IT MAY CONCERN:

This is to certify that: AEP APPALACHIAN POWER
C/O AEP - MOUNTAINEER PLANT
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215-2372

is hereby granted a West Virginia NPDES Water Pollution Control Permit to:
operate and maintain treatment and disposal systems and best management practices for the direct discharge of treated industrial wastes (process, low volume wastewater, coal pile runoff, metal cleaning wastewater, cooling tower blowdown, landfill leachate, FGD wastewater, and stormwater) via Outlet 001 into the Ohio River near Mile Point 242.

Also to operate and maintain disposal systems and best management practices for the direct discharge of untreated storm water runoff via Outlet 003 into Little Broad Run, a tributary of the Ohio River.

Also to operate and maintain disposal systems and best management practices for the direct discharge of untreated storm water runoff via Outlet 006 into the Ohio River near Mile Point 242.

Also to operate and maintain an intake system and best management practices designated as Outlet INT for the withdrawal of water from the Monongahela River at approximate Milepost 242.

Also to acquire, construct, install, operate, and maintain a new 14-acre, lined East Settling Pond and 14-acre, lined West Settling Pond and adjacent tank-based chemical treatment system (organosulfide and polymer) to replace the Bottom Ash Wastewater Treatment Ponds at Outlet 001.

Also to acquire, construct, install, operate, and maintain a new ultrafiltration unit (pressure filter) to provide additional treatment at the CPS Treatment Facility at new Outlet 201.

Both the new Outlet 001 and 201 treatment systems shall be constructed per plans and specifications in "Mountaineer Plant, 2021 NPDES Permit Renewal Application Update, NPDES Permit #WV0048500, January 8, 2021" prepared by American Electric Power Service Corporation.

This permit is subject to the following terms and conditions :
The information submitted on and with Permit Application No. WV0048500, dated December 31, 2012, and additional information submitted March 28, 2017 and January 8, 2021, are all hereby made terms and conditions of this permit with like effect as if all such permit application was set forth herein and with other conditions set forth in Section A, B, C, D, and Appendix A.

The validity of this permit is contingent upon the payment of the applicable annual permit fee, as required by Chapter 22, Article 11, Section 10 of the Code of West Virginia.

Inspectable Unit	Latitude	Longitude	Receiving Stream	Dist. to Stream Mouth (in Mile)	Milepost
001	38°58'22"	81°55'37"	OHIO RV	N/A	242.01
003	38°59'03"	81°56'45"	LITTLE BROAD RUN/SEAMAN RN	0.1	N/A
006	38°59'26"	81°56'30"	OHIO RV	N/A	243.64
101	38°58'22"	81°55'37"	N/A	N/A	N/A
106	38°59'26"	81°56'30"	OHIO RV	N/A	243.64
201	38°58'22"	81°55'37"	N/A	N/A	N/A
INT	38°58'22"	81°55'37"	N/A	N/A	N/A

A.001 DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS:

Permit Limits

During the period beginning Effective Date of Permit and lasting through midnight Expiration Date of Permit the permittee is authorized to discharge from Outlet Number(s) 001 (Cooling Water, Storm Water Runoff, Process Water, Other)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Quantity		Units		Other Units		Units	Monitoring Requirements Measurement Frequency	Sample Type
50050 - (Flow,in Conduit or thru plant) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mgd	Continuous	measured
00530 - (Total Suspended Solids) (Year Round) (ML-1) (RF-A) Interim (Initial to 05/31/2022)	N/A	N/A	N/A	N/A	24 Avg. Monthly	78 Max. Daily	mg/l	1/week	24 hr Composite
00530 - (Total Suspended Solids) (Year Round) (ML-1) (RF-A) Final (Remaining duration)	N/A	N/A	N/A	N/A	16 Avg. Monthly	65 Max. Daily	mg/l	1/week	24 hr Composite
00400 - (pH) (Year Round) (ML-1) (RF-A)	N/A	N/A	N/A	6 Inst. Min.	N/A	9 Inst. Max.	S.U.	1/week	Grab
00610 - (Ammonia Nitrogen) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/quarter	24 hr Composite
50060 - (Chlorine, Total Residual) (Year Round) (ML-1) (RF-A) Interim (Initial to 05/31/2022)	N/A	N/A	N/A	N/A	15 Avg. Monthly	44 Max. Daily	ug/l	2/month	Grab
50060 - (Chlorine, Total Residual) (Year Round) (ML-1) (RF-A) Final (Remaining duration)	N/A	N/A	N/A	N/A	18 Avg. Monthly	53 Max. Daily	ug/l	2/month	Grab
01119 - (Copper, Total Recoverable) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/quarter	24 hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
Outlet 001, at the discharge to the Ohio River via a 46" CMP

This discharge shall comply with Appendix A - I MANAGEMENT CONDITIONS I - 12.

A.001 DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS:

Permit Limits

During the period beginning Effective Date of Permit and lasting through midnight Expiration Date of Permit the permittee is authorized to discharge from Outlet Number(s) 001 (Cooling Water, Storm Water Runoff, Process Water, Other)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Quantity		Units		Other Units		Units	Monitoring Requirements Measurement Frequency	Sample Type
71900 - (Mercury, Total (as Hg)) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	ug/l	1/quarter	Grab
01104 - (Aluminum, Total Recoverable) (Year Round) (ML-1) (RF-A)	N/A	N/A	N/A	N/A	0.36 Avg. Monthly	0.75 Max. Daily	mg/l	2/month	24 hr Composite
00980 - (Iron, Total Recoverable) (Year Round) (ML-1) (RF-A)	N/A	N/A	N/A	N/A	1.1 Avg. Monthly	2.5 Max. Daily	mg/l	2/month	24 hr Composite
00940 - (Chloride (as Cl)) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/quarter	24 hr Composite
00951 - (Fluoride, Total) (Year Round) (ML-5) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/quarter	24 hr Composite
61425 - (Acute Tox - Ceriodaphnia Dub (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	TUa	1/6 months	24 hr Composite
61427 - (Acute Toxicity - Pimephales) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	TUa	1/6 months	24 hr Composite
34601 - (2,4-Dichlorophenol) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	ug/l	1/quarter	24 hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
Outlet 001, at the discharge to the Ohio River via a 46" CMP

This discharge shall comply with Appendix A - I MANAGEMENT CONDITIONS I - 12.

A.001 DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS:

Permit Limits

During the period beginning Effective Date of Permit and lasting through midnight Expiration Date of Permit the permittee is authorized to discharge from Outlet Number(s) 001 (Cooling Water, Storm Water Runoff, Process Water, Other)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations Quantity		Units		Other Units		Units	Monitoring Requirements Measurement Frequency	Sample Type
34616 - (2,4-Dinitrophenol) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	ug/l	1/quarter	24 hr Composite
34657 - (4,6-Dinitro-o-cresol) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	ug/l	1/quarter	24 hr Composite
39100 - (BIS(2-Ethylhexyl) Phthalate) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	ug/l	1/quarter	Grab
34621 - (2,4,6-Trichlorophenol) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	ug/l	1/quarter	24 hr Composite
00011 - (Temperature, F) (Year Round) (ML-1) (RF-A) Effluent	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	DEG.F	1/month	Insitu
00011 - (Temperature, F) (Year Round) (ML-7) (RF-A) Intake/Upstream Temperature	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	DEG.F	1/month	Insitu
81020 - (Sulfate) (Year Round) (ML-1) (RF-A)	N/A	N/A	N/A	N/A	1427 Avg. Monthly	1993 Max. Daily	mg/l	2/month	24 hr Composite
00927 - (Magnesium,Tot (as Mg)) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/quarter	24 hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
Outlet 001, at the discharge to the Ohio River via a 46" CMP

This discharge shall comply with Appendix A - I MANAGEMENT CONDITIONS I - 12.

A.001 DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS:

Permit Limits

During the period beginning Effective Date of Permit and lasting through midnight Expiration Date of Permit the permittee is authorized to discharge from Outlet Number(s) 001 (Cooling Water, Storm Water Runoff, Process Water, Other)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations							Monitoring Requirements	
	Quantity		Units		Other Units		Units	Measurement Frequency	Sample Type
39032 - (Pentachlorophenol)	N/A	N/A	N/A	N/A	Rpt Only	Rpt Only	ug/l	1/quarter	24 hr Composite
(Year Round) (ML-1) (RF-B)					Avg. Monthly	Max. Daily			
00552 - (Oil and Grease, Hexane EXTI	N/A	N/A	N/A	N/A	12	15	mg/l	1/month	Grab
(Year Round) (ML-1) (RF-A)					Avg. Monthly	Max. Daily			
Interim (Initial to 05/31/2022)									
00552 - (Oil and Grease, Hexane EXTI	N/A	N/A	N/A	N/A	8	13	mg/l	1/month	Grab
(Year Round) (ML-1) (RF-A)					Avg. Monthly	Max. Daily			
Final (Remaining duration)									

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
Outlet 001, at the discharge to the Ohio River via a 46" CMP

This discharge shall comply with Appendix A - I MANAGEMENT CONDITIONS I - 12.

A.003 DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS:

Permit Limits

During the period beginning Effective Date of Permit and lasting through midnight Expiration Date of Permit the permittee is authorized to discharge from Outlet Number(s) 003 (Storm Water Runoff)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations						Monitoring Requirements		
	Quantity		Units		Other Units		Units	Measurement Frequency	Sample Type
50050 - (Flow,in Conduit or thru plant) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mgd	1/6 months	Estimated
00530 - (Total Suspended Solids) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/6 months	Grab
00400 - (pH) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	Rpt Only Inst. Min.	N/A	Rpt Only Inst. Max.	S.U.	1/6 months	Grab
01119 - (Copper, Total Recoverable) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/6 months	Grab
01094 - (Zinc, Total Recoverable) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/6 months	Grab
01002 - (Arsenic, Total (as As)) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/6 months	Grab
71900 - (Mercury, Total (as Hg)) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	ug/l	1/6 months	Grab
01104 - (Aluminum, Total Recoverable) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/6 months	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
Outlet 003, at the discharge to Little Broad Run via a 30" CMP.

This discharge shall comply with Appendix A - I MANAGEMENT CONDITIONS I - 12.

A.003 DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS:

Permit Limits

During the period beginning Effective Date of Permit and lasting through midnight Expiration Date of Permit the permittee is authorized to discharge from Outlet Number(s) 003 (Storm Water Runoff)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations						Monitoring Requirements		
	Quantity		Units		Other Units		Units	Measurement Frequency	Sample Type
00980 - (Iron, Total Recoverable) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/6 months	Grab
00981 - (Selenium, Total Recoverable) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/6 months	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
Outlet 003, at the discharge to Little Broad Run via a 30" CMP.

This discharge shall comply with Appendix A - I MANAGEMENT CONDITIONS I - 12.

A.006 DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS:

Permit Limits

During the period beginning Effective Date of Permit and lasting through midnight Expiration Date of Permit the permittee is authorized to discharge from Outlet Number(s) 006 (Storm Water Runoff)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations						Monitoring Requirements		
	Quantity		Units		Other Units		Units	Measurement Frequency	Sample Type
50050 - (Flow,in Conduit or thru plant) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mgd	1/6 months	Estimated
00530 - (Total Suspended Solids) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/6 months	Grab
00400 - (pH) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	Rpt Only Inst. Min.	N/A	Rpt Only Inst. Max.	S.U.	1/6 months	Grab
01119 - (Copper, Total Recoverable) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/6 months	Grab
01094 - (Zinc, Total Recoverable) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/6 months	Grab
01002 - (Arsenic, Total (as As)) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/6 months	Grab
71900 - (Mercury, Total (as Hg)) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	ug/l	1/6 months	Grab
01104 - (Aluminum, Total Recoverable) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/6 months	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
Outlet 006, at the discharge to the Ohio River via a 36" corrugated plastic pipe.

This discharge shall comply with Appendix A - I MANAGEMENT CONDITIONS I - 12.

A.006 DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS:

Permit Limits

During the period beginning Effective Date of Permit and lasting through midnight Expiration Date of Permit the permittee is authorized to discharge from Outlet Number(s) 006 (Storm Water Runoff)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations						Monitoring Requirements		
	Quantity		Units		Other Units		Units	Measurement Frequency	Sample Type
00980 - (Iron, Total Recoverable) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/6 months	Grab
00981 - (Selenium, Total Recoverable) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/6 months	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
Outlet 006, at the discharge to the Ohio River via a 36" corrugated plastic pipe.

This discharge shall comply with Appendix A - I MANAGEMENT CONDITIONS I - 12.

A.101 DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS:

Permit Limits

During the period beginning Effective Date of Permit and lasting through midnight Expiration Date of Permit the permittee is authorized to discharge from Outlet Number(s) 101 (Process Water)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations							Monitoring Requirements	
	Quantity		Units		Other Units		Units	Measurement Frequency	Sample Type
50050 - (Flow,in Conduit or thru plant) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mgd	Once/Daily Discharge	Estimated
					Sampling shall not to exceed 2 times a month				
01042 - (Copper, Total (as Cu)) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	1 Avg. Monthly	1 Max. Daily	mg/l	Once/Daily Discharge	Grab
					Sampling shall not to exceed 2 times a month				
01045 - (Iron, Total (as Fe)) (Year Round) (ML-1) (RF-C)	N/A	N/A	N/A	N/A	1 Avg. Monthly	1 Max. Daily	mg/l	Once/Daily Discharge	Grab
					Sampling shall not to exceed 2 times a month				

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
Internal Outlet 101, at the discharge from the metal cleaning waste treatment tank prior to entering the wastewater treatment system.

A.106 DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS:

Permit Limits

During the period beginning effective date of permit and lasting through midnight expiration date of permit the permittee is authorized to discharge from Outlet Number(s) 106 (Other)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations							Monitoring Requirements	
	Quantity		Units		Other Units		Units	Measurement Frequency	Sample Type
50050 - (Flow,in Conduit or thru plant) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mgd	Once/Daily Discharge	Estimated
Sampling shall not exceed twice per month.									
00530 - (Total Suspended Solids) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	100 Max. Daily	mg/l	Once/Daily Discharge	Grab
Sampling shall not exceed twice per month.									
00400 - (pH) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	6 Inst. Min.	N/A	9 Inst. Max.	S.U.	Once/Daily Discharge	Grab
Sampling shall not exceed twice per month.									
50060 - (Chlorine, Total Residual) (Year Round) (ML-1) (RF-B)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	57 Max. Daily	ug/l	Once/Daily Discharge	Grab
During hypochlorite treatment only. Not to exceed twice per month.									

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outlet 106, at the discharge to the Ohio River via a 36" corrugated plastic pipe (same as Outlet 006). This outlet is for reporting of fire supression system flush waters only. Stormwater only discharges shall be reported via Outlet 006.

This discharge shall comply with Appendix A - I MANAGEMENT CONDITIONS I - 12.

A.201 DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS:

Permit Limits

During the period beginning effective date of permit and lasting through midnight expiration date of permit the permittee is authorized to discharge from Outlet Number(s) 201 (Process Water)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations						Monitoring Requirements		
	Quantity		Units		Other Units		Units	Measurement Frequency	Sample Type
50050 - (Flow,in Conduit or thru plant) (Year Round) (ML-1) (RF-A)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mgd	1/month	measured
71900 - (Mercury, Total (as Hg)) (Year Round) (ML-1) (RF-A) Interim (Initial to 06/30/2023)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	ug/l	1/month	24 hr Composite
71900 - (Mercury, Total (as Hg)) (Year Round) (ML-1) (RF-A) Final (Remaining duration)	N/A	N/A	N/A	N/A	0.013 Avg. Monthly	0.04 Max. Daily	ug/l	1/month	24 hr Composite
00981 - (Selenium, Total Recoverable) (Year Round) (ML-1) (RF-A) Interim (Initial to 06/30/2023)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/month	24 hr Composite
00981 - (Selenium, Total Recoverable) (Year Round) (ML-1) (RF-A) Final (Remaining duration)	N/A	N/A	N/A	N/A	0.012 Avg. Monthly	0.029 Max. Daily	mg/l	1/month	24 hr Composite
00978 - (Arsenic, Total Recoverable) (Year Round) (ML-1) (RF-A) Interim (Initial to 06/30/2023)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/month	24 hr Composite
00978 - (Arsenic, Total Recoverable) (Year Round) (ML-1) (RF-A) Final (Remaining duration)	N/A	N/A	N/A	N/A	0.004 Avg. Monthly	0.008 Max. Daily	mg/l	1/month	24 hr Composite
00630 - (Nitrite Plus Nitrate Nitrogen) (Year Round) (ML-1) (RF-A) Interim (Initial to 06/30/2023)	N/A	N/A	N/A	N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	mg/l	1/month	24 hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
Internal Outlet 201, at the discharge from CTP / ultrafiltration unit prior to entering the clearwater pond.

A.201 DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS:

Permit Limits

During the period beginning effective date of permit and lasting through midnight expiration date of permit the permittee is authorized to discharge from Outlet Number(s) 201 (Process Water)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations							Monitoring Requirements	
	Quantity		Units		Other Units		Units	Measurement Frequency	Sample Type
00630 - (Nitrite Plus Nitrate Nitrogen) (Year Round) (ML-1) (RF-A) Final (Remaining duration)	N/A	N/A	N/A	N/A	1.2 Avg. Monthly	1.6 Max. Daily	mg/l	1/month	24 hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
Internal Outlet 201, at the discharge from CTP / ultrafiltration unit prior to entering the clearwater pond.

A.INT INTAKE MONITORING REQUIREMENTS:

Permit Limits

During the period beginning effective date of permit and lasting through midnight expiration date of permit the permittee will monitor Outlet Number(s) INT (Intake)

Such intake shall be monitored by the permittee as specified below:

Intake Characteristic	Monitoring Requirements							Measurement Frequency	Sample Type
	Quantity		Units		Other Units		Units		
51641 - (Cycles of Concentration) (Year Round) (ML-7) (RF-A)	N/A	N/A	N/A	3 Min. Weekly Avg.	N/A	N/A	cycles	1/daily	Calculated
See Section D.2.c									

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Closed-cycle recirculation system, the permittee shall measure intake flow, blowdown flow, condenser flow, and condenser temperature delta (or conductivity) and report the results as cycles of concentration of the close-loop recycle cooling system.

B. SCHEDULE OF COMPLIANCE

1. **The permitee shall achieve compliance with the provisions for waste treatment and the monitoring requirements specified in the permit in accordance with the following schedule :**

Oct 01, 2021:	The permittee shall submit a progress report that identifies the status of the actions taken, as well as the actions to be taken, to complete closure of the West BAP of the former Bottom Ash Pond treatment system. The permittee shall also submit a progress report that identifies the status of the actions taken, as well as the actions to be taken, to come into compliance with the final effluent limitations for arsenic, mercury, nitrate+nitrite, and selenium at Outlet 201.
Feb 01, 2022:	Complete preliminary and detailed design for Outlet 001 to support bid packages, including civil, mechanical, and electrical engineering packages for the pond complex modifications. Also complete preliminary and detailed design for Outlet 201 to support bid packages, including civil, mechanical, and electrical/I&C packages fo the FGD treatment system.
Jun 01, 2022:	Cease discharge of bottom ash transport wastewaters to the Outlet 001 combined wastewater system. Achieve compliance with the final effluent limitations in Section A.001 for TSS and O&G. The permittee shall also submit a progress report that identifies the status of the actions taken, as well as the actions to be taken, to come into compliance with the final effluent limitations for arsenic, mercury, nitrate+nitrite, and selenium at Outlet 201.
Feb 01, 2023:	Complete closure (i.e. removal of the CCR material and decontamination of the CCR unit) and repurposing of East BAP of the former Bottom Ash Pond treatment system. The permittee shall also submit a progress report that identifies the status of the actions taken, as well as the actions to be taken, to come into compliance with the final effluent limitations for arsenic, mercury, nitrate+nitrite, and selenium at Outlet 201.
Jul 01, 2023:	Complete construction, performance testing and tuning for the ultrafiltration (pressure filter) FGD treatment system. Achieve compliance with final effluent limitations in Section A.201 for arsenic, mercury, nitrate+nitrite, and selenium. The permittee shall also submit a progress report that identifies the status of the actions taken, as well as the actions to be taken, to complete closure of the West BAP of the former Bottom Ash Pond treatment system.
Dec 01, 2023:	Complete closure (i.e. removal of the CCR material and decontamination of the CCR unit) and repurposing of West BAP of the former Bottom Ash Pond treatment system.
Jun 01, 2025:	The permittee shall submit a detailed flow analysis and wastewater inventory at Outlet 001. At a minimum, the flow analysis shall include quantitative (or qualitative engineering estimates where quantitative estimates are impractical) average and maximum flows for each waste type at each outlet (regulated vs non-regulated). The wastewater inventory shall at a minimum detail the status (source, dilute vs process) of each subtype of flow on the facilities' "Current Water Balance Diagram" and/or "Proposed (2024) Water Balance Diagram" dated 08/05/2020 and 1/4/2021. For Outlet 001 which has a documented mixture of process wastewater (per 40 CFR 432) and non-regulated, dilute wastewater input into the respective treatment systems a major modification shall be submitted to adjust/update TSS and O&G limitations in Section A.

2. **Reports of compliance or non-compliance with, and progress reports on interim and final requirements contained in the above compliance schedule, if any, shall be postmarked no later than 14 days following each schedule date.**

Section C - Other Requirements

1. The permittee shall practice good housekeeping including maintaining the facility grounds. There shall be no scattered parts, equipment, debris, etc. Any and all drums shall be either stored in a covered area or kept upon pallets and properly sealed.
2. The issuance of this permit shall not relieve the permittee of the obligation to comply with any other federal, state or local laws. Compliance with this permit does not relieve the permittee from the obligation of Section 311 of the Clean Water Act. This permit does not authorize spills of hazardous substances/wastes from any permitted outlet into waters of the State. Such incidents are to be reported in accordance with Sections IV.1 and IV.2 of Appendix A of this permit.
3. Upon review of information submitted under terms and conditions of this permit, the permit may be modified to require additional effluent limitations/monitoring requirements and/or improved best management practices.
4. The permittee shall notify the Division of Water and Waste Management immediately when it becomes aware of any migration of any pollutant from any unpermitted source (such as contaminated groundwater and/or storm water) into surface waters of the State.
5. Without prior approval from the agency, the permittee shall not accept and treat wastewater from any other facility.
6. The permittee shall submit each month according to the enclosed format, a Discharge Monitoring Report (DMR) indicating in terms of concentration and/or quantities the values of the constituents listed in Section A analytically determined to be in the plant effluent(s). Additional information pertaining to effluent monitoring and reporting can be found in Section III of Appendix A.
7. The required DMRs shall be received by the agency no later than 25 days following the end of the reporting period in accordance with the following requirements. The agency is now requiring the permittee to utilize our electronic discharge monitoring report (eDMR) system which is now mandatory. The permittee is not required to submit hard copies of the DMRs to the addresses listed below when using eDMR. Special circumstances may result in the agency granting an exemption to eDMR and are considered on case by case basis. If the permittee was exempted by the agency from using the eDMR system, then the permittee is required to send hard copies to the addresses below. The permittee may contact the agency for more information about the eDMR system and potential exemptions from using it. Regardless, in accordance with Appendix A, Section III.6 of this permit, the permittee shall maintain copies of DMRs (either hard copies or electronic copies) at the plant site and the DMRs shall be made readily available upon request for DEP personnel.

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Director                                    U. S. Environmental Protection Agency
Division of Water and Waste Management      Region III, Water Protection Division
601 57th Street, SE                         NPDES Enforcement Branch (3WP42)
Charleston, West Virginia  25304            1650 Arch Street
Attn: Permitting Branch                     Philadelphia, PA  19103


Department of Environmental Protection
Environmental Enforcement
601 57th Street, SE
Charleston, West Virginia  25304
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8. For any noncompliance reports to be submitted in writing by this permit, a copy shall also be forwarded to the EPA at the location specified under Condition C.7. of this permit.
9. Any "not detected (ND)" results by the permittee must be "ND" at the method detection limit (MDL) for the test method used for that parameter and must be reported as less than the MDL used. The permittee may not report the result as zero, "ND", or report the result as less than a minimum level (ML), reporting limit (RL), or practical quantitation limit (PQL).

   When averaging values of analytical results for DMR reporting purposes for monthly averages, the permittee should use actual analytical results when these results are greater than or equal to the MDL and should use zero (0) when these results are less than the MDL. If all analytical results are non-detect at the MDL (<MDL), then the permittee should use the actual MDL in the calculation for averaging and report the result as less than the average calculation.

Section C - Other Requirements

10. In incidences where a specific test method is not defined, the permittee shall utilize an EPA approved method with a method detection limit (MDL) sensitive enough to confirm compliance with the permit effluent limit for that parameter. If a MDL is not sensitive enough to confirm compliance, the most sensitive approved method must be used. If a more sensitive EPA approved method becomes available, that method shall be used. Should the current and/or new method not be sensitive enough to confirm compliance with the permitted effluent limit, analytical results reported as "not detected" at the MDL of the most sensitive method available will be deemed compliant for purposes of permit compliance. Results shall be reported on the Discharge Monitoring Reports as a numeric value less than the MDL.
11. The permittee shall not use alternate DMRs without prior approval from this Agency.
12. The Groundwater Protection Plan (GPP) shall be maintained at the plant site and shall be available for inspection by the Division of Water and Waste Management personnel.
13. The permittee shall maintain and implement the storm water pollution prevention plan (SWPPP) for the site. The SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with the industrial activity. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with the industrial activity at the facility and to assure compliance with the terms and conditions of this permit. A copy of this document shall be retained at the site and shall be available for review upon request from DEP personnel.
14. The following storm water requirements apply to Outlets 003 and 006:
    a. Samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Samples shall be taken during the first thirty (30) minutes, or as soon thereafter as practicable, of the storm event.
    b. Each outlet shall be monitored separately.
    c.

Pollutant	Benchmark Value
Total Suspended Solids	100 mg/l
pH	6.0 to 9.0 S.U.
Total Copper	0.0636 mg/l
Total Zinc	0.117 mg/l
Total Aluminum	0.75 mg/l
Total Selenium	0.005 mg/l
Total Iron	1.5 mg/l
Total Arsenic	0.16854 mg/l
Total Mercury	0.0014 mg/l

    When the concentration results from a minimum of four consecutive samples of a pollutant are all less than the corresponding benchmark value for the pollutant, additional monitoring for the pollutant is not required (all pH values of the samples must be within the range 6.0 to 9.0 S.U.). The facility shall submit, each year, to the Division of Water and Waste Management, in lieu of the monitoring data, a certification (form will be provided upon request) that there has not been a significant change in the industrial activity or the pollution prevention measures in the area of the facility that drains to the outlet for which sampling is to be waived. If the concentration of a pollutant exceeds the corresponding benchmark concentration or a pH value is not within the range of 6.0 to 9.0 S.U., monitoring shall be continued and storm water pollution prevention practices shall be revised and implemented. A letter stating the revised and implemented storm water pollution prevention practices shall be submitted to the Division of Water and Waste Management at the address listed in Section C.7.
15. The facility shall maintain a Spill Prevention Control and Countermeasures (SPCC) Plan as required by Section 311(j) of the Clean Water Act. At a minimum the plan shall include all the required elements in 40 CFR 112 of the Code of Federal Regulations and be independently certified by a licensed professional engineer.
16. If there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with industrial activity covered by this permit, the permit may be promptly modified and/or reissued to include effluent limitations and/or other requirements to control such storm water discharges.

Section C - Other Requirements

17. The permittee shall perform acute effluent toxicity testing in accordance with the following.
    a. The acute effluent toxicity testing prescribed, herein, shall be 48-hour static acute toxicity tests utilizing Pimephales Promelas fathead minnow and Ceriodaphnia Dubia as the test species.
    b. The acute toxicity testing shall be performed on a semi-annual (1/6 months) basis. The first acute toxicity testing shall be carried out within 6 months from the effective date of the permit for Outlet 001.
    c. 24-hour flow weighted composite samples of the effluent, as prescribed in Section A, shall be collected for testing.
    d. The dilution water should be a representative sample of the receiving water and should be obtained from a point as close as possible to but upstream or outside of the zone influenced by the effluent. If dilution water from the receiving stream is not suitable, some other uncontaminated, well-aerated surface or groundwater or commercially available media or reconstituted laboratory water can be used.
    e. Testing and reporting of the result shall be performed in accordance with 40 CFR 136 and must be submitted with the Discharge Monitoring Report (DMR) for the month following the completion of each test. LC50 shall be converted into Acute Toxic Units (TUa) using the following formula:

       TUa = 100/LC50
       For example, if LC50 is 100%, then TUa = 100/100 = 1.

       When the LC50 is greater than 100%, the permittee shall report the acute toxicity as less than 1 TUa. When the effluent demonstrates no toxicity (no organisms die), the permittee may report zero TUa.
    f. If acute effluent toxicity testing shows noncompliance with the specified limitations prescribed in Section A, the permittee shall immediately resample and test the effluent. This shall be performed within 30 days of the initial demonstration of noncompliance with the whole effluent toxicity discharge limitations prescribed herein. Copies of the retesting results shall be provided to the Director immediately upon completion of the test.
    g. The Director may impose further requirements should the acute effluent toxicity testing results demonstrate noncompliance.
18. The permittee shall utilize EPA Method No. 1664 A (gravimetric analysis using the hexane extractable method [HEM]) for the analysis of oil and grease.
19. Effluent monitoring for the following pollutants shall be conducted using the most sensitive methods and detection levels commercially available and economically feasible. The following methods are to be used unless the permittee desires to use an EPA Approved Test Method with a listed lower method detection level. Regardless, it is recognized that detection levels can vary from analysis to analysis and that non-detect results at a different MDL for the specified test method would not constitute a permit violation.

Parameter	EPA Method No.	Recommended Detection Level (ug/l)
Zinc, Total Recoverable	200.8	0.5
Arsenic, Total	200.8	0.6
Selenium, Total Recoverable	200.9	0.6
Copper, Total Recoverable	200.8	0.5
Mercury, Total*	245.7	0.0018
Mercury, Total*	1631	0.0002
Bis(2-ethylhexyl)phthalate	525.2	0.49
2,4,6-trichlorophenol	604	0.64
2,4-dichlorophenol	604	0.39
2,4-dinitrophenol	604	0.45
4,6-dinitro-o-cresol	604	16
Pentachlorophenol	515.2	0.14

*The permittee may use either Method 245.7 or Method 1631 for the analysis of mercury.

20. The permittee is relieved of the reporting requirements for the following substances consistent with Exclusion 2 and 3 of Section 311 of the Clean Water Act.

Ammonium Hydroxide	Sodium Hydroxide	Sulfuric Acid
Calcium Hypochlorite	Sodium Nitrite	

Section C - Other Requirements

20. The permittee is not, however, relieved of the requirements of Section IV.2 of Appendix A of this permit.

21. As required by 40 CFR 423.13(d)(1), there shall be no detectable amount of each of the 126 priority pollutants found in 40 CFR 423 Appendix A (other than chromium which is limited to 0.2 mg/l and zinc which is limited to 1.0 mg/l) due to their presence in chemicals added for cooling tower maintenance. The permittee may use the following maintenance chemicals:

Chlorine	Bleach
Gengard GN7004	Depositrol BL5400
Fluorscein	Sulfuric Acid
Fomaldehyde	Sodium Nitrite
KlariaidCDP 1302	Spectrus OX103
Sodium Hydroxide	Ferric Chloride
KlaraidCDP1346	Metclear MR2416
Novus CE2681	Spectrus AE1125
Lime	ABMet Olympus Culture
Molasses based custom blends	Activated Carbon
Ammonia	Formic Acid
Hydroxyacetic Acid	Ammonium bifluoride
Inhibitor OSI-1	Polymer 1138
Foamtrol AF2290	Sno-Glo Bleach
Spectrus CT1301	Klaraid 1301
Metclear MR2405	Dustreat DC9123
Dustreat DC9131E	Accord
Turf Trimec Broadleaf	Roundup
Spike - 40P, 5G, 80W	Stomp 3.3EC
Pendulum 3.3EC	Miracle Grow
Cygon 2-E	Ortho Diazinon Plus
Dormant Oil	Ortho Malathion 50 Plus
RDC - 400	

22. The permittee shall operate and maintain barge loading and unloading facilities in such a manner so as, to the maximum extent practicable, preclude spillage of coal, chemicals, etc. used at the facility, and shall take all actions necessary to clean up and control any such spill which may occur.

23. In conformance with the requirements of Appendix A, Part II, Section 5, Removed Substances, the permittee shall obtain approval for the disposal of any solids generated by the wastewater treatment plant. This approval shall be afforded in accordance with the provisions of Title 33, Series 2, of the Legislative Rules, accordingly, and 40 CFR Part 503, as applicable.

24. Available sampling methods for total residual chlorine (TRC) are currently not sensitive enough to confirm compliance with the permit limitations imposed. Total residual chlorine (TRC) samples shall be taken, preserved and analyzed in accordance with the latest edition of 40 CFR Part 136. Because the permittee does not operate a certified wastewater laboratory at the plant site but still must comply with the instantaneous sample-type requirements, the permittee shall use an EPA Approved Method with at least a method detection level (MDL) of 100 ug/l. Any TRC sampling result reported as less than the MDL stated above shall be assumed to confirm compliance for purposes of permit compliance. Should a more sensitive EPA approved method become available for field analysis of TRC, the permittee shall perform TRC self-monitoring in accordance with the new method. If the new method is not sensitive enough to determine compliance with specified TRC limits, analytical results reported as "not detected" at the MDL of the new method will be deemed compliant for purposes of permit compliance.

25. If the permittee seeks to qualify any electric generating unit that will achieve permanent cessation of coal combustion by December 31, 2028, a Notice of Planned Participation shall be made to the permitting authority, no later than October 13, 2021.

Section C - Other Requirements

25. a. Any Notice of Planned Participation shall be submitted with a major permit modification application and identify the electric generating units intended to achieve the permanent cessation of coal combustion. A Notice of Planned Participation shall include the expected date that each electric generating unit is projected to achieve permanent cessation of coal combustion, whether each date represents a retirement or a fuel conversion, whether each retirement or fuel conversion has been approved by a regulatory body, and what the relevant regulatory body is. The Notice of Planned Participation shall also include a copy of the most recent integrated resource plan for which the applicable state agency approved the retirement or repowering of the unit subject to the ELGs, certification of electric generating unit cessation under 40 CFR 257.103(b), or other documentation supporting that the electric generating unit will permanently cease the combustion of coal by December 31, 2028. The Notice of Planned Participation shall also include, for each such electric generating unit, a timeline to achieve the permanent cessation of coal combustion. Each timeline shall include interim milestones and the projected dates of completion.

26. Any facility providing the required documentation, via submittal of a major permit modification application, pursuant to § 423.19(g) may avail itself of the protections of a low utilization electric generating unit or permanently ceasing the combustion of coal by December 31, 2028, if such qualification would have been demonstrated absent the following qualifying events:

    a. An emergency order issued by the Department of Energy under Section 202(c) of the Federal Power Act,

    b. A reliability must run agreement issued by a Public Utility Commission, or

    c. Any other reliability-related order or agreement issued by a competent electricity regulator (e.g., an independent system operator) which results in that electric generating unit operating in a way not contemplated when the certification was made; or

    d. The operation of the electric generating unit was necessary for load balancing in an area subject to a declaration under 42 U.S.C. 5121 et seq., that there exists:

        1. An "Emergency," or

        2. A "Major Disaster," and

        3. That load balancing was due to the event that caused the "Emergency" or "Major Disaster" in paragraph (a)(4) of this section to be declared,

27. The new wastewater pond(s) (i.e. former east and west BAP pond footprints) shall be lined with a double synthetic liner and leak detection and removal system consisting of two 40-millimeter HDPE (upper and lower liners), synthetic geonet leak detection and removal layer, and leak collection piping or an equivalent spec'ed liner and leak detection system.

    Installation of the minimum controls specified above does not relieve the permittee from future installation of additional engineering controls and/or remediation of impacts upon migration of pollutants from the wastewater ponds to waters of the State. The permittee shall ensure proper operation and maintenance of the liners and shall take take immediate action to repair any breach of the liners.

28. The temperature difference between the upstream/intake location and the discharge shall be calculated by subtracting the discharge temperature from the upstream/intake temperature measured in the Ohio River. The upstream/intake temperatures and discharge temperatures required by Section A of this permit shall be collected concurrently. Concurrently shall be defined as no more than 30 minutes between monitoring collected at the upstream/intake location in the Ohio River and the discharge.

Section D - 316 (b) Intake Requirements

1. In accordance with 316(b) of the Clean Water Act, the location, design, construction, and capacity of the cooling water intake structures (CWIS) for the permittee's facility shall reflect the best technology available (BTA) for minimizing adverse environmental impingement and entrainment at the intake structure.
2. On the basis of currently available information, the agency has determined that the facility will meet the BTA requirements 40 CFR 125.94 by choosing the BTA standard in 40 CFR 125.94(c)(1) for impingement mortality of closed-cycle recirculation system.
   a. The permittee has provided information that the facility operates a 18 x 25 x 73 (L x W x D) foot caisson with three 36-inch intake pipes extending from the caisson below grade approximately 310 feet horizontally into the Ohio River to provide make-up water to the 97.6% closed-water cooling system.
   b. The make-up cooling water intake system consists of three (one operational, two backup) vertical turbine, double suction, single-stage river water make-up pumps discharge water to a 48-inch header:

      Primary Pump (max flow rate): 20,000 gpm (28.8 mgd)
      Secondary Backup Pumps (max flow rate): 20,000 gpm x 2 (57.6 mgd)
      Measured Velocity: N/A
      Design Velocity: 0.25 ft/s @ 10,000 gpm
      Effective Intake Screen Area: Unknown
      Calculated make-up flow rate: 11,520 - 14,400 gpm
      Calculated cycles of concentration: 3.0 - 6.0
      Calculated % recycle: 97.6 %

   c. To comply with the impingement mortality BTA requirement of 316(b) the permittee shall measure the intake flow, blowdown flow, condenser flow, and condenser temperature delta (or alternatively via conductivity) on a daily basis to calculate cycles of concentration of the closed-cycle recirculation system. Cycles of concentration shall not average less than 3.0 (i.e. greater than 97.5% reduction) on a weekly average during steady state operation (data collection during startup and shutdown of individual units, i.e. non-steady state, may be excluded).

      The permittee shall use calculation procedures in "Clean Water Act, 316(b) Compliance Submittal Requirements, Prepared For: American Electric Power, Prepared by: HDR Engineer, Inc., February 9, 2018" to calculate cycles of concentration for reporting purposes in Section A.INT.
3. The permittee shall operate its intake to ensure that the total withdrawal from the Ohio River is less than 5% of the mean annual flow of the Ohio River.

   This is considered to meet the BTA entrainment requirements of 40 CFR 125.94(d) and 316(b) of the Clean Water Act.
4. The permittee has identified the following species as Federally or West Virginia State threatened or endangered with a potential to occur within the AEP Mountaineer Plant Action Area:
   a. Cyprogenia stegaria (Fanshell)
      Lampsilis abrupta (Pink Mucket)
      Plethobasus cyphyus (Sheepnose Mussel)
      Epioblasma triquetra (Snuffbox Mussel)
      Myotis sodalis (Indiana Bat)
      Myotis septentrionalis (Northern Long-eared Bat)
      Trifolium stoloniferum (Running Buffalo Clover)
   b. The permittee does not believe that it has impacted Federally or State listed species and has not sought or obtained an incidental take exemption or authorization from the United States Fish and Wildlife Service or West Virginia Division of Natural Services. However, nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act (40 CFR 125.98(b)(1)).
5. Pursuant to 40 CFR 122.62, the permit may also be reopened and modified with requirements of new regulations, standards, or judicial decisions relating to 316(b) of Clean Water Act.

The herein-described activity is to be extended, modified, added to, made, enlarged, acquired, constructed or installed, and operated, used and maintained strictly in accordance with the terms and conditions of this permit, with the plans and specifications submitted with Permit Application No. WV0048500; with the plan of maintenance and method of operation thereof submitted with such application(s); and with any applicable rules and regulations promulgated by the Environmental Quality Board and the Secretary of the Department of Environmental Protection.

Failure to comply with the terms and conditions of this permit, with the plans and specifications submitted with Permit Application No. WV0048500; and with the plan of maintenance and method of operation thereof submitted with such application(s) shall constitute grounds for the revocation or suspension of this permit and the invocation of all the enforcement procedures set forth in Chapter 22, Article 11, or 15 of the Code of West Virginia.

This permit is issued in accordance with the provisions of Chapter 22, Article 11 and 12 and/or 15 of the Code of West Virginia and is transferable under the terms of Section 11 of Article 11.

_____

Katheryn Emery, P.E., Acting Director

Appendix A

I. MANAGEMENT CONDITIONS:

1. Duty to Comply

a) The permittee must comply with all conditions of this permit. Permit noncompliance constitutes a violation of the CWA and State Act and is grounds for enforcement action; for permit modification, revocation and reissuance, suspension or revocation; or for denial of a permit renewal application.

b) The permittee shall comply with all effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

2. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit at least 180 days prior to expiration of the permit.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment.

4. Permit Actions

This permit may be modified, revoked and reissued, suspended, or revoked for cause. The filing of a request by the permittee for permit modification, revocation and reissuance, or revocation, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

5. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

6. Signatory Requirements

All applications, reports, or information submitted to the Director shall be signed and certified as required in Title 47, Series 10 , Section 4.6 of the West Virginia Legislative Rules.

7. Transfers

This permit is not transferrable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary.

8. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable specified time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, suspending, or revoking this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

9. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

10. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

a) Enter upon the permittee's premises in which an effluent source or activity is located, or where records must be kept under the conditions of this permit;

b) Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;

c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the State Act, any substances or parameters at any location.

11. Permit Modification

This permit may be modified, suspended, or revoked in whole or in part during its term in accordance with the provisions of Chapter 22-11-12 of the Code of West Virginia.

12. Water Quality

This discharge shall not cause or materially contribute to: distinctly visible floating or settable solids, suspended solids, scum, foam or oily slicks; deposits or sludge bank on the bottom; odors in the vicinity of the waters; taste or odor that would adversely affect the designated uses of the affected waters; distinctly visible color which may impair or interfere with the designated uses of the affected waters; and shall not cause a fish or mussel kill. The limitations and conditions in this permit for the discharges identified in this permit are limitations and conditions that are necessary to meet applicable West Virginia water quality standards, Requirements Governing Water Quality Standards 47 CSR 2.

13. Outlet Markers

A permanent marker at the establishment shall be posted in accordance with Title 47, Series 11, Section 9 of the West Virginia Legislative Rules.

14. Liabilities

a) Any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed $25,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing sections 301, 302, 306, 307, 308 or 405 of the Clean Water Act is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

b) Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 2 years, or by both.

c) Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 2 years, or by both.

d) Nothing in I.14 a), b), and c) shall be construed to limit or prohibit any other authority the Director may have under the State Water Pollution Control Act, Chapter 22, Article 11.

II. OPERATION AND MAINTENANCE:

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures. Unless otherwise required by Federal or State law, this provision requires the operation of back-up auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit. For domestic waste treatment facilities, waste treatment operators as classified by the WV Bureau of Public Health Laws, W. Va. Code Chapter 16-1, will be required except that in circumstances where the domestic waste treatment facility is receiving any type of industrial waste, the Director may require a more highly skilled operator.

2. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

3. Bypass

a) Definitions

(1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility; and

(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of II.3.c) and II.3.d) of this permit.

c) (1) If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass;

(2) If the permittee does not know in advance of the need for bypass, notice shall be submitted as required in IV.2.b) of this permit.

d) Prohibition of bypass

(1) Bypass is permitted only under the following conditions, and the Director may take enforcement action against a permittee for a bypass, unless;

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and

(C) The permittee submitted notices as required under II.3.c) of this permit.

(2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed in II.3.d.(1) of this permit.

4. Upset

a) Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitation if the requirements of II.4.c) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted notice of the upset as required in IV.2.b) of this permit.

(4) The permittee complied with any remedial measures required under I.3. of this permit.

d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Removed Substances

Where removed substances are not otherwise covered by the terms and conditions of this permit or other existing permit by the Director, any solids, sludges, filter backwash or other pollutants (removed in the course of treatment or control of wastewaters) and which are intended for disposal within the State, shall be disposed of only in a manner and at a site subject to the approval by the Director. If such substances are intended for disposal outside the State or for reuse, i.e., as a material used for making another product, which in turn has another use, the permittee shall notify the Director in writing of the proposed disposal or use of such substances, the identity of the prospective disposer or users, and the intended place of disposal or use, as appropriate.

III. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. Reporting

a) Permittee shall submit, according to the enclosed format, a Discharge Monitoring Report (DMR) indicating in terms of concentration, and/or quantities, the values of the constituents listed in Part A analytically determined to be in the plant effluent(s). DMR submissions shall be made in accordance with the terms contained in Section C of this permit.

b) Enter reported average and maximum values under "Quantity" and "Concentration" in the units specified for each parameter, as appropriate.

c) Specify the number of analyzed samples that exceed the allowable permit conditions in the columns labeled "N.E." (i.e., number exceeding).

d) Specify frequency of analysis for each parameter as number of analyses/specified period (e.g.,3/month is equivalent to 3 analyses performed every calendar month). If continuous, enter "Cont.". The frequency listed on format is the minimum required.

3. Test Procedures

Samples shall be taken, preserved and analyzed in accordance with the latest edition of 40 CFR Part 136, unless other test procedures have been specified elsewhere in this permit.

4. Recording of Results

For each measurement or sample taken pursuant to the permit, the permittee shall record the following information.

a) The date, exact place, and time of sampling or measurement;

b) The date(s) analyses were performed;

c) The individual(s) who performed the sampling or measurement;

d) The individual(s) who performed the analyses; if a commercial laboratory is used, the name and address of the laboratory;

e) The analytical techniques or methods used, and

f) The results of such analyses. Information not required by the DMR form is not to be submitted to this agency, but is to be retained as required in III.6.

5. Additional Monitoring by Permittee

If the permittee monitors any pollutant at any monitoring point specified in this permit more frequently than required by this permit, using approved test procedures or others as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report Form. Such increased frequency shall also be indicated. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.

6. Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

7. Definitions

a) "Daily discharge" means the discharge of a pollutant measured during a calendar day or within any specified period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

b) "Average monthly discharge limitation" means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

c) "Maximum daily discharge limitation" means the highest allowable daily discharge.

d) "Composite Sample" is a combination of individual samples obtained at regular intervals over a time period. Either the volume of each individual sample is proportional to discharge flow rates or the sampling interval (for constant volume samples) is proportional to the flow rates over the time period used to produce the composite. The maximum time period between individual samples shall be two hours.

e) "Grab Sample" is an individual sample collected in less than 15 minutes.

f) "is" = immersion stabilization - a calibrated device is immersed in the effluent stream until the reading is stabilized.

g) The "daily average temperature" means the arithmetic average of temperature measurements made on an hourly basis, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar month, or during the operating month if flows are of shorter duration.

h) The "daily maximum temperature" means the highest arithmetic average of the temperatures observed for any two (2) consecutive hours during a 24 hour day, or during the operating day if flows are of shorter duration.

i) The "monthly average fecal coliform" bacteria is the geometric average of all samples collected during the month.

j) "Measured Flow" means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or which a relationship to absolute volume has been obtained.

k) "Estimate" means to be based on a technical evaluation of the sources contributing to the discharge including, but not limited to pump capabilities, water meters and batch discharge volumes.

l) "Non-contact cooling water" means the water that is contained in a leak-free system, i.e., no contact with any gas, liquid, or solid other than the container for transport; the water shall have no net poundage addition of any pollutant over intake water levels, exclusive of approved anti-fouling agents.

IV. OTHER REPORTING

1. Reporting Spills and Accidental Discharges

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to Title 47, Series 11, Section 2 of the West Virginia Legislative Rules promulgated pursuant to Chapter 22, Article 11. Attached is a copy of the West Virginia Spill Alert System for use in complying with Title 47, Series 11, Section 2 of the Legislative rules as they pertain to the reporting of spills and accidental discharges.

2. Immediate Reporting

a) The permittee shall report any noncompliance which may endanger health or the environment immediately after becoming aware of the circumstances by using the Agency's designated spill alert telephone number. A written submission shall be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

b) The following shall also be reported immediately:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit;

(2) Any upset which exceeds any effluent limitation in the permit; and

(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit shall be reported immediately. This list shall include any toxic pollutant or hazardous substance, or any pollutant specifically identified as the method to control a toxic pollutant or hazardous substance.

c) The Director may waive the written report on a case-by-case basis if the oral report has been received in accordance with the above.

d) Compliance with the requirements of IV.2 of this section, shall not relieve a person of compliance with Title 47, Series 11, Section 2.

3. Reporting Requirements

a) Planned changes. The permittee shall give notice to the Director of any planned physical alterations or additions to the permitted facility which may affect the nature or quantity of the discharge. Notice is required when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in Section 13.7.b of Series 10, Title 47; or

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under IV.2 of this section.

b) Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

c) In addition to the above reporting requirements, all existing manufacturing, commercial, and silvicultural discharges must notify the Director in writing as soon as they know or have reason to believe:

(1) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, or any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(A) One hundred micrograms per liter (100 ug/l);

(B) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitro phenol; and for 2-methyl 4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(C) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Section 4.4.b.9 of Series10, Title 47.

(D) The level established by the Director in accordance with Section 6.3.g of Series 10, Title 47;

(2) That any activity has occurred or will occur which would result in any discharge (on a non-routine or infrequent basis) of a toxic which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(A) Five hundred micrograms per liter (500 ug/l);

(B) One milligram per liter (1 mg/l) for antimony;

(C) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Section 4.4.b.7 of Series 10, Title 47;

(D) The level established by the Director in accordance with Section 6.3.g of Series 10, Title 47.

(3) That they have begun or expect to begin to use or manufacture as an intermediate or final product or by-product of any toxic pollutant which was not reported in the permit application under Section 4.4.b.9 of Series 10, Title 47 and which will result in the discharge on a routine or frequent basis of that toxic pollutant at levels which exceed five times the detection limit for that pollutant under approved analytical procedure.

(4) That they have begun or expect to begin to use or manufacture as an intermediate or final product or by-product of any toxic pollutant which was not reported in the permit application under Section 4.4.b.9 of Series 10, Title 47 and which will result in the discharge on a non-routine or infrequent basis of that toxic pollutant at levels which exceed ten times the detection limit for that pollutant under approved analytical procedure.

4. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under the above paragraphs at the time monitoring reports are submitted. The reports shall contain the information listed in IV.2.a). Should other applicable noncompliance reporting be required, these terms and conditions will be found in Section C of this permit.

WRD 2A-82

STATE OF WEST VIRGINIA
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Permit Limits

FACILITY NAME: (Appalachian Power Company dba American Electric Power - Mount
LOCATION OF FACILITY: NEW HAVEN; Mason County
PERMIT NO.: WV0048500 001
WASTELOAD FOR THE MONTH OF:

CERTIFIED LABORATORY NAME:
CERTIFIED LABORATORY ADDRESS:
INDIVIDUAL PERFORMING ANALYSIS:

Parameter		Quantity				Other Units						Measurement Frequency	Sample Type
				Units	N.E.				CEL*	Units	N.E.		
50050 (ML-1) RF-B Flow,in Conduit or thru plant Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mgd		Continuous	measured
00530 (ML-1) RF-A Total Suspended Solids Year Round Interim (Initial to 05/31/2022)	Reported												
	Permit Limits	N/A	N/A			N/A	24 Avg. Monthly	78 Max. Daily	N/A	mg/l		1/week	24 hr Composite
00530 (ML-1) RF-A Total Suspended Solids Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	16 Avg. Monthly	65 Max. Daily	N/A	mg/l		1/week	24 hr Composite
00400 (ML-1) RF-A pH Year Round	Reported												
	Permit Limits	N/A	N/A			6 Inst. Min.	N/A	9 Inst. Max.	N/A	S.U.		1/week	Grab
00610 (ML-1) RF-B Ammonia Nitrogen Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/quarter	24 hr Composite
50060 (ML-1) RF-A Chlorine, Total Residual Year Round Interim (Initial to 05/31/2022)	Reported												
	Permit Limits	N/A	N/A			N/A	15 Avg. Monthly	44 Max. Daily	100	ug/l		2/month	Grab

* CEL = Compliance Evaluation Level

Name of Principal Executive Officer	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of a fine and imprisonment for knowing violations.	Date Completed
Title of Officer		Signature of Principal Executive Officer or Authorized Agent

WRD 2A-82

STATE OF WEST VIRGINIA
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DISCHARGE MONITORING REPORT

Permit Limits

FACILITY NAME: (Appalachian Power Company dba American Electric Power - Mount
LOCATION OF FACILITY: NEW HAVEN; Mason County
PERMIT NO.: WV0048500 001
WASTELOAD FOR THE MONTH OF:

CERTIFIED LABORATORY NAME:
CERTIFIED LABORATORY ADDRESS:
INDIVIDUAL PERFORMING ANALYSIS:

Parameter		Quantity				Other Units						Measurement Frequency	Sample Type
				Units	N.E.				CEL*	Units	N.E.		
50060 (ML-1) RF-A Chlorine, Total Residual Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	18 Avg. Monthly	53 Max. Daily	100	ug/l		2/month	Grab
01119 (ML-1) RF-B Copper, Total Recoverable Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/quarter	24 hr Composite
71900 (ML-1) RF-B Mercury, Total (as Hg) Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	ug/l		1/quarter	Grab
01104 (ML-1) RF-A Aluminum, Total Recoverable Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	0.36 Avg. Monthly	0.75 Max. Daily	N/A	mg/l		2/month	24 hr Composite
00980 (ML-1) RF-A Iron, Total Recoverable Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	1.1 Avg. Monthly	2.5 Max. Daily	N/A	mg/l		2/month	24 hr Composite
00940 (ML-1) RF-B Chloride (as Cl) Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/quarter	24 hr Composite

* CEL = Compliance Evaluation Level

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PERMIT NO.: WV0048500 001
WASTELOAD FOR THE MONTH OF:

CERTIFIED LABORATORY NAME:
CERTIFIED LABORATORY ADDRESS:
INDIVIDUAL PERFORMING ANALYSIS:

Parameter		Quantity				Other Units						Measurement Frequency	Sample Type
				Units	N.E.				CEL*	Units	N.E.		
00951 (ML-5) RF-B Fluoride, Total Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/quarter	24 hr Composite
61425 (ML-1) RF-C Acute Tox - Ceriodaphnia Dubia Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	TUa		1/6 months	24 hr Composite
61427 (ML-1) RF-C Acute Toxicity - Pimephales Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	TUa		1/6 months	24 hr Composite
34601 (ML-1) RF-B 2,4-Dichlorophenol Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	ug/l		1/quarter	24 hr Composite
34616 (ML-1) RF-B 2,4-Dinitrophenol Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	ug/l		1/quarter	24 hr Composite
34657 (ML-1) RF-B 4,6-Dinitro-o-cresol Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	ug/l		1/quarter	24 hr Composite

* CEL = Compliance Evaluation Level

Name of Principal Executive Officer	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of a fine and imprisonment for knowing violations.	Date Completed
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Permit Limits

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LOCATION OF FACILITY: NEW HAVEN; Mason County
PERMIT NO.: WV0048500 001
WASTELOAD FOR THE MONTH OF:

CERTIFIED LABORATORY NAME:
CERTIFIED LABORATORY ADDRESS:
INDIVIDUAL PERFORMING ANALYSIS:

Parameter		Quantity				Other Units						Measurement Frequency	Sample Type
				Units	N.E.				CEL*	Units	N.E.		
39100 (ML-1) RF-B BIS(2-Ethylhexyl) Phthalate Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	ug/l		1/quarter	Grab
34621 (ML-1) RF-B 2,4,6-Trichlorophenol Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	ug/l		1/quarter	24 hr Composite
00011 (ML-7) RF-A Temperature, F Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	DEG.F		1/month	Insitu
00011 (ML-1) RF-A Temperature, F Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	DEG.F		1/month	Insitu
81020 (ML-1) RF-A Sulfate Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	1427 Avg. Monthly	1993 Max. Daily	N/A	mg/l		2/month	24 hr Composite
00927 (ML-1) RF-B Magnesium,Tot (as Mg) Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/quarter	24 hr Composite

* CEL = Compliance Evaluation Level

Name of Principal Executive Officer	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of a fine and imprisonment for knowing violations.	Date Completed
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STATE OF WEST VIRGINIA
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DISCHARGE MONITORING REPORT

Permit Limits

FACILITY NAME: (Appalachian Power Company dba American Electric Power - Mount
LOCATION OF FACILITY: NEW HAVEN; Mason County
PERMIT NO.: WV0048500 001
WASTELOAD FOR THE MONTH OF:

CERTIFIED LABORATORY NAME:
CERTIFIED LABORATORY ADDRESS:
INDIVIDUAL PERFORMING ANALYSIS:

Parameter		Quantity				Other Units						Measurement Frequency	Sample Type
				Units	N.E.				CEL*	Units	N.E.		
39032 (ML-1) RF-B Pentachlorophenol Year Round	Reported								N/A	ug/l		1/quarter	24 hr Composite
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily					
00552 (ML-1) RF-A Oil and Grease, Hexane EXTR. Year Round Interim (Initial to 05/31/2022)	Reported								N/A	mg/l		1/month	Grab
	Permit Limits	N/A	N/A			N/A	12 Avg. Monthly	15 Max. Daily					
00552 (ML-1) RF-A Oil and Grease, Hexane EXTR. Year Round	Reported								N/A	mg/l		1/month	Grab
	Permit Limits	N/A	N/A			N/A	8 Avg. Monthly	13 Max. Daily					

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Title of Officer		Signature of Principal Executive Officer or Authorized Agent

WRD 2A-82

STATE OF WEST VIRGINIA
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Permit Limits

FACILITY NAME: (Appalachian Power Company dba American Electric Power - Mount
LOCATION OF FACILITY: NEW HAVEN; Mason County
PERMIT NO.: WV0048500 003
WASTELOAD FOR THE MONTH OF:

CERTIFIED LABORATORY NAME:
CERTIFIED LABORATORY ADDRESS:
INDIVIDUAL PERFORMING ANALYSIS:

Parameter		Quantity				Other Units						Measurement Frequency	Sample Type
				Units	N.E.				CEL*	Units	N.E.		
50050 (ML-1) RF-C Flow,in Conduit or thru plant Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mgd		1/6 months	Estimated
00530 (ML-1) RF-C Total Suspended Solids Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/6 months	Grab
00400 (ML-1) RF-C pH Year Round	Reported												
	Permit Limits	N/A	N/A			Rpt Only Inst. Min.	N/A	Rpt Only Inst. Max.	N/A	S.U.		1/6 months	Grab
01119 (ML-1) RF-C Copper, Total Recoverable Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/6 months	Grab
01094 (ML-1) RF-C Zinc, Total Recoverable Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/6 months	Grab
01002 (ML-1) RF-C Arsenic, Total (as As) Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/6 months	Grab

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STATE OF WEST VIRGINIA
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Permit Limits

FACILITY NAME: (Appalachian Power Company dba American Electric Power - Mount
LOCATION OF FACILITY: NEW HAVEN; Mason County
PERMIT NO.: WV0048500 003
WASTELOAD FOR THE MONTH OF:

CERTIFIED LABORATORY NAME:
CERTIFIED LABORATORY ADDRESS:
INDIVIDUAL PERFORMING ANALYSIS:

Parameter		Quantity				Other Units						Measurement Frequency	Sample Type
				Units	N.E.				CEL*	Units	N.E.		
71900 (ML-1) RF-C Mercury, Total (as Hg) Year Round	Reported								N/A	ug/l		1/6 months	Grab
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily					
01104 (ML-1) RF-C Aluminum, Total Recoverable Year Round	Reported								N/A	mg/l		1/6 months	Grab
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily					
00980 (ML-1) RF-C Iron, Total Recoverable Year Round	Reported								N/A	mg/l		1/6 months	Grab
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily					
00981 (ML-1) RF-C Selenium, Total Recoverable Year Round	Reported								N/A	mg/l		1/6 months	Grab
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily					

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WRD 2A-82

STATE OF WEST VIRGINIA
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Permit Limits

FACILITY NAME: (Appalachian Power Company dba American Electric Power - Mount
LOCATION OF FACILITY: NEW HAVEN; Mason County
PERMIT NO.: WV0048500 006
WASTELOAD FOR THE MONTH OF:

CERTIFIED LABORATORY NAME:
CERTIFIED LABORATORY ADDRESS:
INDIVIDUAL PERFORMING ANALYSIS:

Parameter		Quantity				Other Units						Measurement Frequency	Sample Type
				Units	N.E.				CEL*	Units	N.E.		
50050 (ML-1) RF-C Flow,in Conduit or thru plant Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mgd		1/6 months	Estimated
00530 (ML-1) RF-C Total Suspended Solids Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/6 months	Grab
00400 (ML-1) RF-C pH Year Round	Reported												
	Permit Limits	N/A	N/A			Rpt Only Inst. Min.	N/A	Rpt Only Inst. Max.	N/A	S.U.		1/6 months	Grab
01119 (ML-1) RF-C Copper, Total Recoverable Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/6 months	Grab
01094 (ML-1) RF-C Zinc, Total Recoverable Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/6 months	Grab
01002 (ML-1) RF-C Arsenic, Total (as As) Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/6 months	Grab

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STATE OF WEST VIRGINIA
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Permit Limits

FACILITY NAME: (Appalachian Power Company dba American Electric Power - Mount
LOCATION OF FACILITY: NEW HAVEN; Mason County
PERMIT NO.: WV0048500 006
WASTELOAD FOR THE MONTH OF:

CERTIFIED LABORATORY NAME:
CERTIFIED LABORATORY ADDRESS:
INDIVIDUAL PERFORMING ANALYSIS:

Parameter		Quantity				Other Units						Measurement Frequency	Sample Type
				Units	N.E.				CEL*	Units	N.E.		
71900 (ML-1) RF-C Mercury, Total (as Hg) Year Round	Reported								N/A	ug/l		1/6 months	Grab
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily					
01104 (ML-1) RF-C Aluminum, Total Recoverable Year Round	Reported								N/A	mg/l		1/6 months	Grab
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily					
00980 (ML-1) RF-C Iron, Total Recoverable Year Round	Reported								N/A	mg/l		1/6 months	Grab
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily					
00981 (ML-1) RF-C Selenium, Total Recoverable Year Round	Reported								N/A	mg/l		1/6 months	Grab
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily					

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WRD 2A-82

STATE OF WEST VIRGINIA
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Permit Limits

FACILITY NAME: (Appalachian Power Company dba American Electric Power - Mount
LOCATION OF FACILITY: NEW HAVEN; Mason County
PERMIT NO.: WV0048500 101
WASTELOAD FOR THE MONTH OF:

CERTIFIED LABORATORY NAME:
CERTIFIED LABORATORY ADDRESS:
INDIVIDUAL PERFORMING ANALYSIS:

Parameter		Quantity				Other Units						Measurement Frequency	Sample Type
				Units	N.E.				CEL*	Units	N.E.		
50050 (ML-1) RF-C Flow,in Conduit or thru plant Year Round	Reported								N/A	mgd		Once/Daily Discharge	Estimated
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily					
01042 (ML-1) RF-C Copper, Total (as Cu) Year Round	Reported								N/A	mg/l		Once/Daily Discharge	Grab
	Permit Limits	N/A	N/A			N/A	1 Avg. Monthly	1 Max. Daily					
01045 (ML-1) RF-C Iron, Total (as Fe) Year Round	Reported								N/A	mg/l		Once/Daily Discharge	Grab
	Permit Limits	N/A	N/A			N/A	1 Avg. Monthly	1 Max. Daily					

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STATE OF WEST VIRGINIA
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Permit Limits

FACILITY NAME: (Appalachian Power Company dba American Electric Power - Mount
LOCATION OF FACILITY: NEW HAVEN; Mason County
PERMIT NO.: WV0048500 106
WASTELOAD FOR THE MONTH OF:

CERTIFIED LABORATORY NAME:
CERTIFIED LABORATORY ADDRESS:
INDIVIDUAL PERFORMING ANALYSIS:

Parameter		Quantity				Other Units						Measurement Frequency	Sample Type
				Units	N.E.				CEL*	Units	N.E.		
50050 (ML-1) RF-B Flow,in Conduit or thru plant Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mgd		Once/Daily Discharge	Estimated
00530 (ML-1) RF-B Total Suspended Solids Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	100 Max. Daily	N/A	mg/l		Once/Daily Discharge	Grab
00400 (ML-1) RF-B pH Year Round	Reported												
	Permit Limits	N/A	N/A			6 Inst. Min.	N/A	9 Inst. Max.	N/A	S.U.		Once/Daily Discharge	Grab
50060 (ML-1) RF-B Chlorine, Total Residual Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	57 Max. Daily	100	ug/l		Once/Daily Discharge	Grab

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STATE OF WEST VIRGINIA
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Permit Limits

FACILITY NAME: (Appalachian Power Company dba American Electric Power - Mount
LOCATION OF FACILITY: NEW HAVEN; Mason County
PERMIT NO.: WV0048500 201
WASTELOAD FOR THE MONTH OF:

CERTIFIED LABORATORY NAME:
CERTIFIED LABORATORY ADDRESS:
INDIVIDUAL PERFORMING ANALYSIS:

Parameter		Quantity				Other Units						Measurement Frequency	Sample Type
				Units	N.E.				CEL*	Units	N.E.		
50050 (ML-1) RF-A Flow,in Conduit or thru plant Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mgd		1/month	measured
71900 (ML-1) RF-A Mercury, Total (as Hg) Year Round Interim (Initial to 06/30/2023)	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	ug/l		1/month	24 hr Composite
71900 (ML-1) RF-A Mercury, Total (as Hg) Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	0.013 Avg. Monthly	0.04 Max. Daily	N/A	ug/l		1/month	24 hr Composite
00981 (ML-1) RF-A Selenium, Total Recoverable Year Round Interim (Initial to 06/30/2023)	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/month	24 hr Composite
00981 (ML-1) RF-A Selenium, Total Recoverable Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	0.012 Avg. Monthly	0.029 Max. Daily	N/A	mg/l		1/month	24 hr Composite
00978 (ML-1) RF-A Arsenic, Total Recoverable Year Round Interim (Initial to 06/30/2023)	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/month	24 hr Composite

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STATE OF WEST VIRGINIA
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE MONITORING REPORT

Permit Limits

FACILITY NAME: (Appalachian Power Company dba American Electric Power - Mount
LOCATION OF FACILITY: NEW HAVEN; Mason County
PERMIT NO.: WV0048500 201
WASTELOAD FOR THE MONTH OF:

CERTIFIED LABORATORY NAME:
CERTIFIED LABORATORY ADDRESS:
INDIVIDUAL PERFORMING ANALYSIS:

Parameter		Quantity				Other Units						Measurement Frequency	Sample Type
				Units	N.E.				CEL*	Units	N.E.		
00978 (ML-1) RF-A Arsenic, Total Recoverable Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	0.004 Avg. Monthly	0.008 Max. Daily	N/A	mg/l		1/month	24 hr Composite
00630 (ML-1) RF-A Nitrite Plus Nitrate Nitrogen Year Round Interim (Initial to 06/30/2023)	Reported												
	Permit Limits	N/A	N/A			N/A	Rpt Only Avg. Monthly	Rpt Only Max. Daily	N/A	mg/l		1/month	24 hr Composite
00630 (ML-1) RF-A Nitrite Plus Nitrate Nitrogen Year Round	Reported												
	Permit Limits	N/A	N/A			N/A	1.2 Avg. Monthly	1.6 Max. Daily	N/A	mg/l		1/month	24 hr Composite

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WRD 2A-82

STATE OF WEST VIRGINIA
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
INTAKE MONITORING REPORT

Permit Limits

FACILITY NAME: (Appalachian Power Company dba American Electric Power - Mount
LOCATION OF FACILITY: NEW HAVEN; Mason County
PERMIT NO.: WV0048500 INT
WASTELOAD FOR THE MONTH OF:

CERTIFIED LABORATORY NAME:
CERTIFIED LABORATORY ADDRESS:
INDIVIDUAL PERFORMING ANALYSIS:

Parameter		Quantity				Other Units						Measurement Frequency	Sample Type
				Units	N.E.				CEL*	Units	N.E.		
51641 (ML-7) RF-A	Reported												
Cycles of Concentration Year Round	Permit Limits	N/A	N/A			3 Min. Weekly Avg.	N/A	N/A	N/A	cycles		1/daily	Calculated

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Title of Officer		Signature of Principal Executive Officer or Authorized Agent

WV/NPDES Permit No.: WV0048500

NOTICE TO PERMITTEES

The 1999 regular session of the West Virginia legislature revised the Water Pollution Control Act, Chapter 22, Article 11, Section 10 of the Code of West Virginia relating to fees associated with permits. This section of the Code requires all holders of a State water pollution control permit or a national pollutant discharge elimination system permit to be assessed an annual permit fee, based upon rules promulgated by the Secretary of the Department of Environmental Protection. The Secretary has promulgated a final rule in accordance with the code revision to this effect and these rules were effective May 4, 2000. The rules establish an annual permit fee based upon the relative potential to degrade the waters of the State which, in most instances, relate to volume of discharge. However, for sewage facilities, the annual permit fee is based upon the number of customers served by the facility. You may contact the Secretary of State's Office, State Capitol Building, Charleston, WV 25305, to obtain a copy of the rules. The reference is Title 47, Legislative Rules, Department of Environmental Protection, Division of Water Resources, Series 26 Water Pollution Control Permit Fee Schedules.

Based upon the volume of discharge for which your facility is currently permitted, the number of customers served by your facility or for the category you fall within, pursuant to Section 7 of Title 47, Series 26, your annual permit fee is **$5000.00**. This fee is due no later than the anniversary date of permit issuance in each year of the term of the permit or in the case of coverage under a general permit, the fee is due no later than the anniversary date of your coverage under the general permit. **You will be invoiced by this agency at the appropriate time for the fee**. Failure to submit the annual fee within ninety(90) days of the due date will render your permit void upon the date you are mailed a certified written notice to that effect.

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER AND WASTE MANAGEMENT

FACT SHEET

1. NAME AND ADDRESS OF APPLICANT

AEP APPALACHIAN POWER
c/o AEP - MOUNTAINEER PLANT
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215-2372

2. NAME AND ADDRESS OF FACILITY

Appalachian Power Company dba American
Electric Power - Mountaineer Plant
W.V. Route 62
New Haven, WV 25265

3. STATE NPDES APPLICATION NO. WV0048500

4. COUNTY Mason

RECEIVING STREAM Ohio River

5. PUBLIC NOTICE NO. L-60-21

COMMENT PERIOD: From 06/29/2021 To 07/29/2021

6. SIC CODE(s) 4911

7. DESCRIPTION OF APPLICANT'S FACILITY OR ACTIVITY

Steam Electric Generating Station with one 1300 MW coal fired unit equipped with electrostatic precipitators and a cooling tower.

8. DESCRIPTION OF DISCHARGES(as reported by applicant):

Effluent Characteristics For Outlet No. 001

			Quantity			Other Units			
Parameter	ML Code	Season	Monthly Avg	Max	Units	Min	Monthly Avg	Max	Units
Acute Tox - Ceriodaphnia D	1	Year Round					< 1.00	< 1.00	TUa
Acute Toxicity - Pimephales	1	Year Round					< 1.00	< 1.00	TUa
Aluminum, Total Recoverat	1	Year Round					0.24	1.10	mg/l
Ammonia Nitrogen	1	Year Round					1.00	6.80	mg/l
Arsenic, Total (as As)	1	Year Round					0.0031	0.0066	mg/l
Barium, Total (as Ba)	1	Year Round					0.08	0.14	mg/l
Chloride (as Cl)	1	Year Round					312.42	654.00	mg/l
Chlorine, Total Residual	1	Year Round					0.08	0.12	mg/l
Chromium, Hexavalent	1	Year Round					0.0002	0.00095	mg/l
Copper, Total Recoverable	1	Year Round					0.0046	0.017	mg/l
Flow,in Conduit or thru plar	1	Year Round					4.57	15.10	mgd
Iron, Total Recoverable	1	Year Round					0.34	1.60	mg/l

8. DESCRIPTION OF DISCHARGES(as reported by applicant) - continue:

Effluent Characteristics For Outlet No. 001

			Quantity			Other Units			
Parameter	ML Code	Season	Monthly Avg	Max	Units	Min	Monthly Avg	Max	Units
Mercury, Total (as Hg)	1	Year Round					0.004	0.016	ug/l
Nickel, Total Recoverable	1	Year Round					0.01	0.01	mg/l
Oil and Grease, Hexane E)	1	Year Round					2.21	5.30	mg/l
pH	1	Year Round				6.93		8.74	S.U.
Phenolics, Total	1	Year Round					0.01	0.06	mg/l
Selenium, Total Recoverab	1	Year Round					0.0027	0.0068	mg/l
Sulfate	1	Year Round					1187.94	2090.00	mg/l
Total Dissolved Solids (TDS	1	Year Round					2376.37	4137.00	mg/l
Total Suspended Solids	1	Year Round					9.77	26.00	mg/l

Effluent Characteristics For Outlet No. 006

			Quantity			Other Units			
Parameter	ML Code	Season	Monthly Avg	Max	Units	Min	Monthly Avg	Max	Units
Aluminum, Total Recoverat	1	Year Round					1.02	3.86	mg/l
Arsenic, Total (as As)	1	Year Round					0.002	0.004	mg/l
Copper, Total Recoverable	1	Year Round					0.0048	0.009	mg/l
Flow,in Conduit or thru plar	1	Year Round					0.05	0.12	mgd
Iron, Total Recoverable	1	Year Round					1.78	6.39	mg/l
Mercury, Total (as Hg)	1	Year Round					0.01	0.02	ug/l
pH	1	Year Round				7.15		8.10	S.U.
Selenium, Total Recoverab	1	Year Round					0.0005	0.0007	mg/l
Total Suspended Solids	1	Year Round					67.20	244.00	mg/l
Zinc, Total Recoverable	1	Year Round					0.01	0.04	mg/l

9. PROPOSED EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Refer to attached Section A and DMR pages of the Draft Permit.

10. RATIONALE FOR PROPOSED EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The Mountaineer Plant is a steam electric power generating facility using closed-cycle cooling water with a cooling tower located on the South bank of the Ohio River, Mason County, at New Haven, West Virginia. All plant effluent streams containing raw materials, chemicals, oil or process water are directed to the plant's

10. RATIONALE FOR PROPOSED EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)
wastewater treatment facilities prior to discharge.

For the purposes of this Fact Sheet, the following abbreviations shall apply:

a) 'Agency' refers to the Division of Water and Waste Management of the Department of Environmental Protection of the State of West Virginia.

b) 'Permittee' refers to Appalachian Power Company (Mountaineer Plant).

c) 'Effluent Guidelines' refers to the final effluent limitations guidelines promulgated by the EPA for Steam Electric Power Generating Point Source Category (40 CFR Part 423).

d) 'WVLR' refers to the West Virginia Legislative Rules of the Department of Environmental Protection, 47 CSR 2 and 47 CSR 10 and 11.

e) 'EPA' refers to the U. S. Environmental Protection Agency.

f) 'FGD' refers to Flue Gas Desulfurization.

g) 'RP' refers to Reasonable Potential as described in EPA's Technical Support Document for Water Quality Based Toxics Control.

Permit conditions are based on the applicable Effluent Guidelines and the Water Quality Standards as outlined in 47 CSR 2 of the WVLR.

RECEIVING WATERS AND WATER USE CLASSIFICATION

The receiving water is the Ohio River in the vicinity of Mile Point 242.

7Q10 Ohio River = 6700 cfs
Assumed Temperature for WQBELs: 27 C
Hardness: 112 mg/l
pH: 7.7 s.u.
Background data for the Ohio River was obtained from ORSANCO.

The Ohio River is 303(d) listed for iron and bacteria. A TMDL was developed for dioxin in 2000 and PCBs in 2002.

NARRATIVE WATER QUALITY

West Virginia does not currently have a numeric water quality criterion prescribed for sulfate. However, the agency does have concerns with the toxicity from this pollutant and its impact on the narrative water quality criteria found in 47 CSR 2, Section 3.2.e which prohibits discharges from discharging materials in concentrations which are harmful to or toxic to man, animal, or aquatic life. Therefore, the agency does possess a narrative water quality criterion which can be used for limiting specific pollutants where the State has no numeric criteria for those pollutants. In order to be protective of the water quality in the Ohio River, the agency believes it is necessary to evaluate the necessity of water quality-based effluent limits for this pollutant due to past use and manufacture at the facility. EPA has established an LC50 of 7,000 mg/l for

10. RATIONALE FOR PROPOSED EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

sulfate for daphnia magna in its ECOTOX database. The agency used 1/10th of this value as the B1,B4 acute aquatic life water quality criterion for sulfate to evaluate if there is reasonable potential to cause or contribute to a violation of the State's narrative water quality criteria.

OUTLET 001 TREATMENT AND ELGs

These treatment facilities consists of a reclaim pond, east and west wastewater ponds, east and west bottom ash ponds, and the clear water pond which are used for neutralization, sedimentation, and oil skimmers for separation. All plant's drains, except non-contaminated yard drains, are directed to the plant's wastewater treatment facilities.

Previous permits imposed 30 mg/l avg monthly / 100 mg/l max daily TSS limits and 15 mg/l average monthly / 20 mg/l max daily O&G limits at Outlet 001. However, the Outlet 001 treatment system is a combined treatment system which contains both regulated wastestreams and non-regulated wastestreams. As such, the 40 CFR 423 ELGs must be adjusted via the combined wastestream formula to prohibit dilution of process wastewater. Based on the flow diagram submitted with the permit application and DMR flows, the ELG limitations have been adjusted for non-regulated flows. An example calculation for the average monthly TSS at Outlet 001 is as follows:

DMR Average Flow (2016-2021) : 4.7 mgd
DMR Max Flow (2016 - 2020) : 15.1 mgd
% Low Volume Wastewater (permit application) : 62
% Coal Pile Runoff (permit application) : 0.82
% Bottom Ash (permit application) : 15
% FGD / CCR (permit application) : 4.2
% Non - process (permit application) : 17.9

Avg Low Volume Wastewater Flow : 2.92 mgd
Avg Coal Pile Runoff Flow : 0.039 mgd
Avg Bottom Ash Flow : 0.71 mgd
Avg FGD / CCR : 0.195 mgd
Avg Non-process Flow : 0.84 mgd

[40 CFR 423.12]
TSS Avg ELG (LVW + Bottom Ash + FGD / CCR) = 30 mg/l x 3.83 mgd x 8.34 = 957 lbs/day
Equivalent TSS Avg ELG limitation at Outlet 001 = 957 lbs/day / 4.7 MGD / 8.34 = 24.4 mg/l

The non-regulated wastewaters are not expected to contribute any significant amounts of oil and grease to the combined treatment system; therefore, no credit was given in calculation of the equivalent O&G ELG at Outlet 001.

O&G Avg ELG (LVW+Bottom Ash + FGD / CCR) = 15 mg/l x 3.83 mgd x 8.34 = 479 lbs/day
Equivalent O&G Avg ELG limitation at Outlet 001 = 479 lbs/day / 4.7 MGD / 8.34 = 12.2 mg/l

A similar calculation was used to calculate the free available chlorine ELG limitations required by 40 CFR 423.13 for cooling tower blowdown to compare to the water quality based total residual chlorine limitations at Outlet 001. It was determined that the free available chlorine limitations are more stringent than the water quality based limitations and therefore the ELG limitations were imposed in Section A.001.

10. RATIONALE FOR PROPOSED EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

With the current renewal application, the permittee has proposed to eliminate bottom ash transport discharges to Outlet 001 and to convert the bottom ash ponds to 14-acre, lined Wastewater Ponds. A tank-based chemical treatment system (organosulfide and polymer) will be constructed. The current schedule has completion by May 31, 2022. This date is before the statutory date of December 31, 2025; therefore, June 1, 2022 is imposed as the compliance deadline for reduction or elimination of bottom ash transport wastewater by 40 CFR 423.13(k)(1)(i).

The permittee will also construct an ultrafiltration treatment system (pressure filter) to treat FGD wastewater and landfill leachate at the oulet of the existing FGD WWTP (new Outlet 201). The project is expected to be completed by June 30, 2023. This date is before the statutory date of December 31, 2025; therefore, July 1, 2023 is imposed as the compliance deadline for new limitations prescribed by 40 CFR 423.13 Table 5. The new ultrafiltration system will be a combined system that treats both FGD wastewater (regulated) and landfill leachate (non-regulated). As such the permit writer used the combined wastewater formula to grant a credit for arsenic, mercury, nitrate-nitrite, and selenium at Outlet 201. An example calculation for average monthly and max daily arsenic is as follows:

FGD Wastewater Avg Flow (existing): 0.252 MGD
Landfill Leachate Avg Flow (existing): 0.396 MGD
ELG Arsenic Removal Efficiency* : 96.3%

FGD Arsenic Avg Mon Limitation (40 CFR 423.13) : 8 ug/l = 0.008 mg/l
Landfill leachate Arsenic Average Conc. (pre-bioreactor, May - August 2020) : 33.8 ug/l = 0.0338 mg/l

FGD Arsenic Avg Mon Limitation Mass: 0.252 MGD x 0.008 ppm x 8.34 = 0.0168 lbs/day
Landfill Leachate Arsenic Mass (pre-bioreactor) : 0.396 MGD x 0.0338 ppm x 8.34 = 0.112 lbs/day
Landfill Leachate Arsenic Mass (post-treatment) : 0.112 lbs/day x (1-0.963) = 0.0041 lbs/day
FGD + Landfill Leachate Arsenic Mass (post-treatment) : 0.0168 lbs/day + 0.0041 lbs/day = 0.0209 lbs/day

Adj FGD Arsenic Avg Mon Limit: 0.0209 lbs/day / (0.252 MGD + 0.396 MGD) / 8.34 = 0.0039 mg/l = 3.9 ug/l

FGD Wastewater Max Flow (existing, assumed) : 0.31 MGD
Landfill Leachate Max Flow (existing, assumed) : 0.49 MGD
ELG Arsenic Removal Efficiency* : 96.3%

FGD Arsenic Max Limitation (40 CFR 423.13) : 18 ug/l = 0.018 mg/l
Landfill leachate Arsenic Max Conc. (pre-bioreactor, assumed) : 50.7 ug/l = 0.0507 mg/l

FGD Arsenic Max Limitation Mass : 0.31 MGD x 0.018 ppm x 8.34 = 0.0465 lbs/day
Landfill Leachate Arsenic Mass (pre-bioreactor) : 0.49 MGD x 0.0507 ppm x 8.34 = 0.206 lbs/day
Landfill Leachate Arsenic Mass (post-treatment) : 0.206 lbs/day x (1-0.963) = 0.0076 lbs/day
FGD + Landfill Leachate Arsenic Mass (post-treatment) : 0.0465 lbs/day + 0.0076 lbs/day = 0.05415 lbs/day

Adj FGD Arsenic Max Daily Limit: 0.05415 lbs/day / (0.31 MGD + 0.49 MGD) / 8.34 = 0.00815 mg/l = 8.15 ug/l

* Supplemental Technical Development Document - Steam Electric Reconsideration Rule

OUTLET 001 WQBELS

10. RATIONALE FOR PROPOSED EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

The permittee monitored for ammonia, arsenic, barium, chloride, hexavalent chromium, copper, mercury, nickel, selenium, total residual chlorine, sulfate, and whole effuent toxicity. A default mixing zone was granted for ammonia, chloride, copper, mercury, selenium, sulfate, and magnesium (zid=3, cmz=10, hhcmz=30). There was reasonable potential to exceed the water quality criteria at the end of pipe and to exceed the water quality criteria at the edge of the default mixing zone for total residual chlorine and sulfate. Limitations are imposed. Monitoring is imposed for the remaining parameters.

The permittee monitored for aluminum and iron. A default mixing zone could not be granted since the receiving stream is 303(d) listed for iron and the background for aluminum is greater than the water quality criteria. There was reasonable potential to exceed the water quality criteria at the end of pipe for both. Limitations are imposed.

The permittee monitored Outlet 001 for Acute Whole Effluent Toxicity (Ceriodaphnia Dubia and Pimephales Promelas) during the term of the last permit. The test endpoint for chronic toxicity testing is the LC50 concentration. Monitoring indicated twenty values of <1.0 TUa for both Ceriodaphnia Dubia and Pimephales Promelas. Using the procedures in EPA's Technical Support Document for Water Quality Based Toxics Control (TSD), a reasonable potential (RP) assessment was performed on the Chronic Whole Effluent Toxicity (WET) results. The agency uses 0.3 TUa as an acute water quality criterion and 1.0 TUc as a chronic water quality criterion to be protective of WV's narrative water quality standards. There was no RP to exceed water quality criteria at the end of pipe for either Ceriodaphnia Dubia or Pimephales Promelas. Monitoring is continued in Section A.001 of the permit. Additional information concerning WET testing and specific requirements are provided in Section C.17 of the draft permit.

Monitoring has been added for fluoride, magnesium, bis(2-ethylhexyl) phthalate, and individual phenolics to generate a database based on detections submitted with permit application.

STORMWATER

Precipitation landing directly in and around the plant's Bottom Ash Pond (BAP) Complex (which includes the Reclaim Pond, east and west Wastewater Ponds, east and west Bottom Ash Ponds, and the Clear Water Pond - totaling approximately 75 acres) eventually is discharged to the Ohio River via a 46-inch metal corrugated pipe via Outlet 001.

Stormwater falling in and around the plant's coal yard is collected in four Coal Yard Run-Off Ponds and pumped to the BAP Complex. The Coal Yard Ponds also receive stormwater run-off from the fuel oil truck unloading containment system as well as all discharges from the limestone stockpile run-off collection containment and gypsum handling area sumps. The total drainage area transferred by the coal yard pumps to the BAP complex is approximately 120 acres.

Outlet 003 - this stormwater outlet conveys stormwater runoff from an area of plant property approximately 85 acres in size. The drainage boundary includes US Route 62 and the portion of the yard north of the generation unit building. All of the stormwater collected in this drainage area passes through a settling pond then through a 30-inch corrugated metal pipe to Little Broad Run Creek. Normal flow to this outlet is dependent solely on rainfall. The last permit contained limits and a compliance schedule for zinc and iron in Outlet 003. Work was done in 2012-13 to redo the entire stormwater system at Mountaineer Power Plant. Since completion of the work, the limits for both zinc and copper have been met. As a result, the limits have

10. RATIONALE FOR PROPOSED EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

been removed and benchmarks established. The modification to complete the storm water changes to Outlet 003 was issued on July 8, 2011.

Outlet 006 - This stormwater outlet conveys stormwater runoff from an area of the plant property approximately 19 acres in size. The final discharge is through a 24-inch corrugated plastic pipe to the Ohio River. This outlet also serves as a final discharge point to the fire suppression system flush waters. The plant fire suppression system is flushed monthly for about five minutes per event (total flow is between 1,500 and 3,000 gallons). In addition, the fire suppression system is treated biannually with sodium hypochlorite for disinfection, but is typically not flushed for several days after the addition of the biocide. Normal flow is dependent solely on rainwater.

Stormwater from much of the plant grounds (most areas to the east and south of the generating unit building) drains to a stormwater sump completed in 2013 which is pumped to the BAP complex. Former Outlets 004, 005, and 011 drain to a sump which is now pumped to the BAP complex. These areas include vegetated plant yards, paved and graveled roadways and parking areas, graveled laydown yards, and various plant process buildings and warehouses. These outlets have been removed from the permit along with Outlets 008, 009, 010, 013, 014, 015, 016, 017, and 018. These drainage areas formerly contributing stormwater runoff for these outlets along the east and north borders of the plant (drainage areas totaling approximately 30 acres), along the Ohio River and Little Broad Run Creek respectively, have been regraded to drain by sheet flow. These outlets have been physically removed or plugged as confirmed by Environmental Enforcement.

OUTLET 106

Outlet 006 also serves as a final discharge point for fire suppression system flush waters. Two 500,000-gallon storage tanks that are filled with well water supply the fire suppression system water. The system is flushed monthly for about five minutes per event (total flow is between 1,500 and 3,000 gallons). In addition, the fire suppression system is treated bi-annually with sodium hypochlorite (SNO-GLO) for disinfection, but is typically not flushed for several days after the addition of the biocide. Due to the potential for solids and residual chlorine during the flushing. Limitations are imposed to protect water quality and compel efficient operation of the flushing system. Since the discharge is non-continuous only the maximum limit is being imposed.

11. RATIONALE FOR VARIANCE DECISIONS

NA

12. DETAILED DESCRIPTION OF LOCATION OF DISCHARGE(s)

Outlet No.	Latitude	Longitude	Receiving Stream
001	38°58'22"	81°55'37"	OHIO RV
003	38°59'03"	81°56'45"	LITTLE BROAD RUN/SEAMAN RN
006	38°59'26"	81°56'30"	OHIO RV
101	38°58'22"	81°55'37"	N/A
106	38°59'26"	81°56'30"	OHIO RV
201	38°58'22"	81°55'37"	N/A

12. DETAILED DESCRIPTION OF LOCATION OF DISCHARGE(s)

Outlet No.	Latitude	Longitude	Receiving Stream
INT	38°58'22"	81°55'37"	N/A

13. ANTIDEGRADATION

Tier 1 protection is afforded for the uses specified in 47 CSR 2, Section 6 of the WV Legislative Rules for the Ohio River and Little Broad Run.

14. OTHER REQUIREMENT(s)

316(b) of the Clean Water Act

This facility operates a cooling water intake structure potentially subject to 316(b) of the Clean Water Act. The permittee has indicated that its intake satisfies BTA requirements of 316(b) and submitted the required information in 40 CFR 122.21(r). Section D has been imposed detailing the reported requirements to satisfy Section 316(b) of the Clean Water Act.

Anti-backsliding

Some water quality based effluent limitations were removed from Section A of the permit. These effluent limitations were based on State water quality criteria in which the instream water quality standards are currently attained (per 402(o)(1) of the Clean Water Act) and in which the revision is consistent with State anti-degradation rules (60 CSR 5). The new requirements are consistent with both federal effluent guidelines and State water quality standards (per 402(o)(3) of the Clean Water Act). Therefore, the revisions are allowed.

The State of West Virginia, Department of Environmental Protection, Division of Water and Waste Management, has made tentative decisions on the application for a State NPDES Permit listed on this Fact Sheet. In order to provide public participation on the proposed issuance of the required permit, the following information is being supplied in accordance with 47 CSR, Series 10, Section 11.3.e.2 and 3, of the West Virginia Legislative Rules.

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for a public hearing shall be made in writing and addressed to:

Director, Division of Water and Waste Management, DEP
601 57th Street SE
Charleston, West Virginia 25304-2345
Attention: Lori Derrick

The request shall state the nature of the issues proposed to be raised in the hearing, and must be received within the comment period. The Director shall hold a public hearing whenever he, or she, finds, on the basis of requests, a significant degree of public interest on issues relevant to the draft permit. Any person may submit oral or written statements and data concerning the draft permit, however, reasonable limits may be set upon the time allowed for oral statements, and the submission of statements in writing may be required. A tape recording or written transcript of the hearing shall be made available to the public, upon request.

If information received during the public comment period appears to raise substantial new questions, the Director may reopen the public comment period.

All applicable information concerning the permit application and the tentative decisions is on file and may be inspected, by appointment, or copies obtained, at a nominal cost, at the offices of the Division of Water and Waste Management, 601 57th Street SE, Charleston, West Virginia 25304-2345, Monday through Friday (except State holidays) between 8:00 a.m. and 4:00 p.m.

Requests for additional information should be directed to Lori Derrick at (304) 926-0499 ext 1057.

WATER QUALITY BASED EFFLUENT LIMITATIONS

v 10.2

Mountaineer Power Plant

Outlet: 001

Stream: Ohio River

Hardness (mg/l):	112	**Instream Waste %:**	0.35
Temperature (°C):	27	**ZID:**	3.0
pH:	7.7	**CMZ:**	10.0
Stream 1Q10 (CFS):	NA	**HH CMZ:**	30.0
Stream 7Q10 (CFS):	6700	**HHA 1/2 Mile Rule CMZ:**	30.0
Effluent Flow (MGD):	15.2		

PARAMETER	Baseline Water Quality (mg/l)	Stream Background (mg/l)	End of Pipe WQC RP	RWC WQC RP	Average Monthly Limit (mg/l)	Maximum Daily Limit (mg/l)	Tier Protection Level
Ammonia	NA	0.0400	Yes	No	Monitor	Monitor	Tier 1
Arsenic	NA	0.0010	No	No	Monitor	Monitor	Tier 1
Barium	NA	0.0464	No	No	Monitor	Monitor	Tier 1
Chloride	NA	23	Yes	No	Monitor	Monitor	Tier 1
Hexavalent Chromium	NA	0.0021	No	No	Monitor	Monitor	Tier 1
Copper	NA	0.0029	Yes	No	Monitor	Monitor	Tier 1
Mercury	NA	0.00000470	Yes	No	Monitor	Monitor	Tier 1
Nickel	NA	0.004	No	No	Monitor	Monitor	Tier 1
Selenium	NA	0.00050	Yes	No	Monitor	Monitor	Tier 1
Total Residual Chlorine	NA	NA	No Data	No Data	0.0284	0.0570	Tier 1
Sulfate	NA	53.60	Yes	Yes	1427.00	1992.80	Tier 1
WET - Ceriodaphnia Dubia	NA	NA	No	No	Monitor	Monitor	Tier 1
WET - Pimephales Promelas	NA	NA	No	No	Monitor	Monitor	Tier 1
Magnesium	NA	7.11000	Yes	No	Monitor	Monitor	Tier 1

Outfall discharges to Ohio River and is subject to ORSANCO Pollution Control Standards:	No
Outfall discharges to a Trout Stream:	No
Outfall discharges to a stream exempt from Human Health A Criteria:	No
Outfall discharges to a stream exempt from all Human Health Criteria:	No
Outfall discharges within 1/2 mile upstream of a public drinking water intake:	No
Outfall has limitations for at least one metal using a site specific translator:	No
Outfall has Tier 2.0 antidegradation limitations for at least one pollutant:	No

WATER QUALITY BASED EFFLUENT LIMITATIONS

v 10.2

Mountaineer Power Plant

Outlet: 001

Stream: Ohio River

Hardness (mg/l):	116	**Instream Waste %:**	0.35
Temperature (°C):	27	**ZID:**	1.0
pH:	7.7	**CMZ:**	1.0
Stream 1Q10 (CFS):	NA	**HH CMZ:**	1.0
Stream 7Q10 (CFS):	6700	**HHA 1/2 Mile Rule CMZ:**	1.0
Effluent Flow (MGD):	15.2		

PARAMETER	Baseline Water Quality (mg/l)	Stream Background (mg/l)	End of Pipe WQC RP	RWC WQC RP	Average Monthly Limit (mg/l)	Maximum Daily Limit (mg/l)	Tier Protection Level
Aluminum	NA	1.1880	Yes	Yes	0.3598	0.7500	Tier 1
Iron	NA	1.7390	Yes	Yes	1.1325	2.4917	Tier 1

Outfall discharges to Ohio River and is subject to ORSANCO Pollution Control Standards:	No
Outfall discharges to a Trout Stream:	No
Outfall discharges to a stream exempt from Human Health A Criteria:	No
Outfall discharges to a stream exempt from all Human Health Criteria:	No
Outfall discharges within 1/2 mile upstream of a public drinking water intake:	No
Outfall has limitations for at least one metal using a site specific translator:	No
Outfall has Tier 2.0 antidegradation limitations for at least one pollutant:	No

Mountaineer Power Plant -- WV0048500
Outlet 001 - Effluent Guidline Limitation (Combined Wastewater Treatment System)
Subject to Federal Effluent Guideline 40 CFR 423 Steam Electric Power Generation

	Avg Flow mgd	Max Flow mgd	Avg TSS mg/l	Max TSS mg/l	Pre-BA Pond Avg TSS lbs/day	Pre-BA Pond Max TSS lbs/day	Removal Efficiency	Outlet 001 Avg TSS lbs/day	Outlet 001 Max TSS lbs/day
Non-process	0.841021439	3.117105715			0.0	0.0	0.91	0.00	0.00
Coalpile	0.038612499	0.322291961							
LVW	2.916379324	8.310126232							
Bottom Ash	0.70865292	2.626503871							
FGD / CCR	0.195333818	0.723972221							

	40 CFR 423.12 (BPT)							
	Avg O&G mg/l	Max O&G mg/l	Avg TSS mg/l	Max TSS mg/l	Avg O&G lbs/day	Max O&G lbs/day	Avg TSS lbs/day	Max TSS lbs/day
Non-Process								
Coalpile				50				134
LVW	15	20	30	100	364.8	1386.1	729.7	6931
Bottom Ash	15	20	30	100	88.7	438.1	177.3	2191
FGD / CCR	15	20	30	100	24.4	120.8	48.9	604
Regulated Wastestreams					477.9	1945.0	955.9	9859.3
Unregulated Wastewater Credit							0.0	0.0

	Outlet 001		
	TSS	O&G	
Total Avg Flow	4.7	4.7	mgd
Total Avg Allowable	955.9	477.9	lbs/day
Total Avg Allowable	**24.4**	**12.2**	**mg/l**
Total Max Flow	15.1	15.1	mgd
Total Max Allowable	9859	1945	lbs/day
Total Max Allowable	**78.3**	**15.4**	**mg/l**

Mountaineer Power Plant -- WV0048500
Outlet 001 - Effluent Guidline Limitation (Combined Wastewater Treatment System)
Subject to Federal Effluent Guideline 40 CFR 423 Steam Electric Power Generation

	Existing Outlet 001 Influent Loadings					
	Avg Flow mgd	**Max Flow** mgd	**Avg TRC** mg/l	**Max TRC** mg/l	**Avg TRC** lbs/day	**Max TRC** lbs/day
Non-Process	0.482152333	1.787017216				
Coalpile	0.038612499	0.322291961				
LVW	2.916379324	8.310126232				
Bottom Ash	0.70865292	2.626503872				
FGD / CCR	0.195333818	0.723972221				
Blowdown	0.358869107	1.330088499				

	40 CFR 423.12 (BAT)			
	Avg TRC mg/l	**Max TRC** mg/l	**Avg TRC** lbs/day	**Max TRC** lbs/day
Non-process				
Coalpile				
LVW				
Bottom Ash				
FGD / CCR				
Blowdown	0.2	0.5	0.6	6
Regulated Wastestreams			0.6	5.5
Unregulated Wastewater Credit			0.0	0.0

	Outlet 001
	TRC
Total Avg Flow	4.7
Total Avg Allowable	0.6
Total Avg Allowable	**0.015**
Total Max Flow	15.1
Total Max Allowable	6
Total Max Allowable	**0.044**

Mountaineer Power Plant -- WV0048500
Outlet 001 - Effluent Guidline Limitation (Combined Wastewater Treatment System)
Subject to Federal Effluent Guideline 40 CFR 423 Steam Electric Power Generation
Post 2022

	Avg Flow mgd	Max Flow mgd	Avg TSS mg/l	Max TSS mg/l	Pre-BA Pond Avg TSS lbs/day	Pre-BA Pond Max TSS lbs/day	Removal Efficiency	Outlet 001 Avg TSS lbs/day	Outlet 001 Max TSS lbs/day
Non-process	2.143091174	5.140596409			0.0	0.0	0.91	0.00	0.00
Coalpile	0.045468044	0.390155941							
LVW	2.281425971	8.692830933							
Bottom Ash	0	0							
FGD / CCR	0.230014811	0.876416717							

	40 CFR 423.12 (BPT)							
	Avg O&G mg/l	Max O&G mg/l	Avg TSS mg/l	Max TSS mg/l	Avg O&G lbs/day	Max O&G lbs/day	Avg TSS lbs/day	Max TSS lbs/day
Non-Process								
Coalpile				50				163
LVW	15	20	30	100	285.4	1450.0	570.8	7250
Bottom Ash	15	20	30	100	0.0	0.0	0.0	0
FGD / CCR	15	20	30	100	28.8	146.2	57.5	731
Regulated Wastestreams					314.2	1596.2	628.4	8143.4
Unregulated Wastewater Credit							0.0	0.0

	Outlet 001		
	TSS	O&G	
Total Avg Flow	4.7	4.7	mgd
Total Avg Allowable	628.4	314.2	lbs/day
Total Avg Allowable	**16.0**	**8.0**	**mg/l**
Total Max Flow	15.1	15.1	mgd
Total Max Allowable	8143	1596	lbs/day
Total Max Allowable	**64.7**	**12.7**	**mg/l**

Mountaineer Power Plant -- WV0048500
Outlet 001 - Effluent Guidline Limitation (Combined Wastewater Treatment System)
Subject to Federal Effluent Guideline 40 CFR 423 Steam Electric Power Generation
Post 2022

	Existing Outlet 001 Influent Loadings					
	Avg Flow mgd	**Max Flow** mgd	**Avg TRC** mg/l	**Max TRC** mg/l	**Avg TRC** lbs/day	**Max TRC** lbs/day
Non-Process	0.56775718	2.163303671				
Coalpile	0.045468044	0.390155941				
LVW	3.434174615	10.05996272				
Bottom Ash	0	0				
FGD / CCR	0.230014811	0.876416717				
Blowdown	0.42258535	1.610160946				

	40 CFR 423.12 (BAT)			
	Avg TRC mg/l	**Max TRC** mg/l	**Avg TRC** lbs/day	**Max TRC** lbs/day
Non-process				
Coalpile				
LVW				
Bottom Ash				
FGD / CCR				
Blowdown	0.2	0.5	0.7	7
Regulated Wastestreams			0.7	6.7
Unregulated Wastewater Credit			0.0	0.0

	Outlet 001
	TRC
Total Avg Flow	4.7
Total Avg Allowable	0.7
Total Avg Allowable	**0.018**
Total Max Flow	15.1
Total Max Allowable	7
Total Max Allowable	**0.053**

Mountaineer Power Plant -- WV0048500

Outlet 201 - Effluent Guidline Limitation (Combined Wastewater Treatment System)

Subject to Federal Effluent Guideline 40 CFR 423 Steam Electric Power Generation

Post FGD Treatment Upgrade - 2022 and later

	Avg mgd	Max mgd
FGD Flows[e]	0.252	0.30996
CCR Flows[e]	0.396	0.49

		Avg Arsenic ug/l	Avg Mercury ng/l	Avg Nitrogen[b] mg/l	Avg Selenium ug/l	Max Arsenic ug/l	Max Mercury ng/l	Max Nitrogen[b] mg/l	Max Selenium ug/l
Final Limits Outlet 203 (post 2024)[a]		8	34	3	29	18	103	4	70
CCR Existing Concentrations[c]		33.8	98.1	7.1	203.4	50.7	147.2	10.7	305.1
Final Limits Outlet 203 (post 2024)	lbs/day	0.0168	7.146E-05	6.3050	0.0609	0.0465	2.663E-04	10.3403	0.1810
Future BioReactor Leachate Influent	lbs/day	0.1116	3.240E-04	23.4487	0.6718	0.2060	5.978E-04	43.2629	1.2394
ELG Model Treatment Removal Efficiency[d]	%	96.3	99.9	98.7	99.2	96.3	99.9	98.7	99.2
Future BioREactor Leachate Effluent	lbs/day	0.0041	3.240E-07	0.3048	0.0054	0.0076	5.978E-07	0.5624	0.0099
Adjusted FGD Limitations	lbs/day	0.020944	7.178E-05	6.6098737	0.066323	0.054152	2.669E-04	10.9026837	0.19087
Adjusted FGD Limitations	mg/l	0.003875	1.328E-05	1.2230722	0.012272	0.008146	4.015E-05	1.64016389	0.028714
Final Limits Outlet 203 (post 2024)		**3.9**	**13.3**	**1.2**	**12.3**	**8.1**	**40.1**	**1.6**	**28.7**

[a] 40 CFR 423.13(g)(1)(i)

[b] Nitrate + Nitrite Nitrogen

[c] Coal Combustion Residuals (landfill leachate) - characteristics provided by permittee

[d] Supplemental Technical Development Document - Steam Electric Reconsideration Rule

[e] FGD flow ratio from Outlet 203 DMRs , avg flow provided in 2020 Permit Application Update / CCR Flows from Future Conditions (2024) flow diagram

WATER QUALITY BASED EFFLUENT LIMITATIONS

v 10.2

Mountaineer Power Plant

Outlet: 106 / 006

Stream: Ohio River

Hardness (mg/l):	112	**Instream Waste %:**	0.00
Temperature (°C):	27	**ZID:**	3.0
pH:	7.7	**CMZ:**	10.0
Stream 1Q10 (CFS):	NA	**HH CMZ:**	30.0
Stream 7Q10 (CFS):	6700	**HHA 1/2 Mile Rule CMZ:**	30.0
Effluent Flow (MGD):	0.003		

PARAMETER	Baseline Water Quality (mg/l)	Stream Background (mg/l)	End of Pipe WQC RP	RWC WQC RP	Average Monthly Limit (mg/l)	Maximum Daily Limit (mg/l)	Tier Protection Level
Total Residual Chlorine	NA	NA	No Data	No Data	0.0570	0.0570	Tier 1

Outfall discharges to Ohio River and is subject to ORSANCO Pollution Control Standards:	No
Outfall discharges to a Trout Stream:	No
Outfall discharges to a stream exempt from Human Health A Criteria:	No
Outfall discharges to a stream exempt from all Human Health Criteria:	No
Outfall discharges within 1/2 mile upstream of a public drinking water intake:	No
Outfall has limitations for at least one metal using a site specific translator:	No
Outfall has Tier 2.0 antidegradation limitations for at least one pollutant:	No